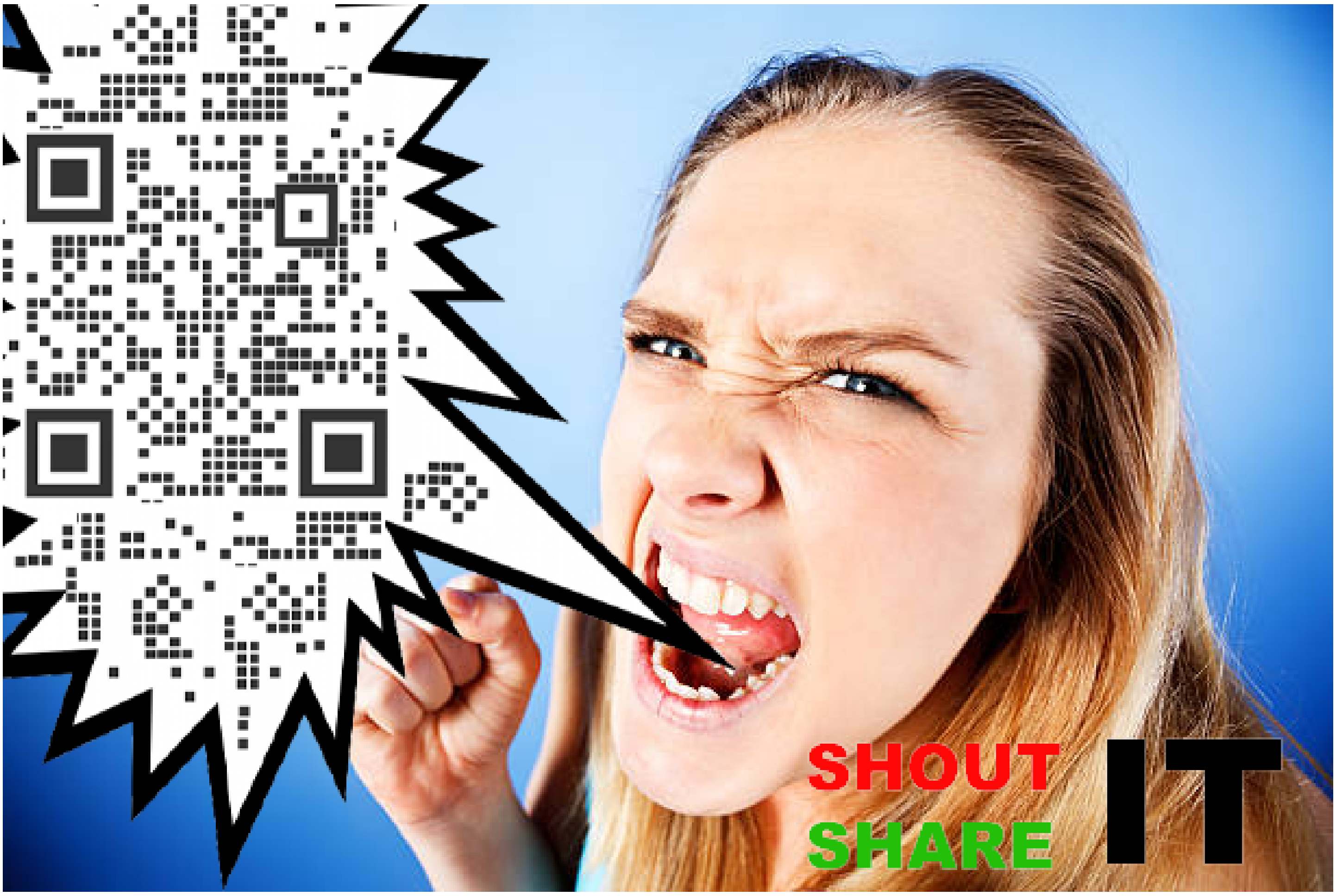
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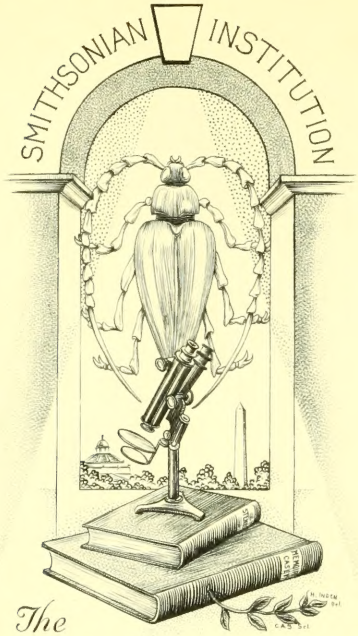
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A REVISION OF THE AMERICAN PAEDERINI.

THOS. L. CASEY.

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A REVISION OF THE AMERICAN PAEDERINI.*

By Thos. L. incoln Casey.

The following revision has been long in contemplation, but it is only recently that the author has felt warranted in beginning the study of so great a multitude of species, most interesting and instructive though they are in their varied structural characters. They indeed form a taxonomic problem hardly less fascinating, though rather less difficult, than that afforded by the still more numerous Aleocharini, the latter being even more diversified in structure and more involved in their relationships with the other tribes of Staphylinidae. But few of our described species are not included in the material serving as the basis of this revision and it is hoped that the relationships of the various genera and species are given with sufficient clearness to enable the student to identify and arrange his material, with a view to the gradual evolution of a more complete and cosmopolitan comparative morphology of the tribe. With this end in view all genera, native and foreign, of which it was possible to procure examples, have been included in the tables, but the only species considered, excepting typical representatives of hitherto undescribed foreign genera, are those which occur in North America above the northern boundary of Mexico.

St. Louis, Mo., Sept., 1904.

PAEDERINI.

The Paederini include all those Staphylinidae, with large anterior coxae, having the fourth joint of the maxillary palpi small and either aciculate, conical or specially modified in structure and the antennae remotely separated and inserted at the extreme sides of the front under a more or less prominent supra-antennal ridge or tumidity. The Aleocharini, Stenini, Euaesthetini and some Xantholinini have the fourth palpal joint small and aciculate, but the antennae are placed more upon the upper surface of the front, in smaller and more exposed foveae and are less widely separated at base, being notably approximate in the Xantholinini. The Pinophilini, having the antennae inserted as in Paederini, have the fourth joint of the maxillary palpi large and very obliquely securiform; they are therefore not closely related to the Paederini and their reference to that tribe as a subtribal group in the European catalogue of Heyden, Reitter and Weise is not justified in any way.

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* Presented by title before The Academy of Science of St. Louis, February 6, 1905.

The general form of the body in this tribe is more or less parallel and moderately to feebly convex; in size they vary from very minute to that of a moderately large *Staphylinus*. The integuments are moderately dense, generally rather sparsely sculptured and with inconspicuous vestiture, except in a few cases, such as the Lithochares and in *Pseudomedon*, where the sculpture and short vestiture become very dense and the surface lustreless. The head is well developed as a rule, but the neck varies greatly in width, more so in fact than in most of the other Staphylinid tribes and forms a valuable taxonomic criterion, as is also the case with the labrum, which is greatly diversified in structure as may be inferred from the generic descriptions of the tables. The fourth joint of the maxillary palpi, although small in size throughout, varies in structure to a remarkable degree as seen in *Gastrolobium*, *Paederus* and *Echiaster*. The ligula may be bilobed, as in the Cryptobia and Lathrobia, fimbriate as in the Lithochares, tridentate as in the Scopaei or unarmed at tip. But comparatively little variation has been noted in the mentum or labial palpi. The gular sutures are greatly diversified and have been employed in the definition of the genera in some of the larger subtribes, such as the Lathrobia and Medones, though within the limits of some others, as in the greater part of the Cryptobia, the Sunii, Stilici and Echiasteres, they are so fixed and uniform as to be of no use in generic classification. These sutures may be either united, forming a single suture, or extremely widely separated and may be most approximate at base or near the anterior part of the post-oral surface of the head, with all intermediate modifications. When considered broadly the gular sutures undoubtedly form very valuable and reliable generic characters in the Paederini. Such other characters as have been found useful in the definition of genera and species will be mentioned under the more or less detailed descriptions or subjoined notes.

Many of the Paederini have been found in the company of ants of various species and it is quite possible that most of them may be thus associated to a greater or less degree of intimacy at some stage of their existence, but in only a very few cases does this association assume the form of true and life-long symbiosis, as in the case of *Megastilicus* for example. A correspondent — Dr. W. M. Wheeler — recently sent me a specimen of *Hesperobium flavicorne*, with the statement that it had been hatched from pupae found in the nests of *Formica incerta* Emery. Probably in such cases the Staphylinid is an intruder, for the subsequent life-history of the numerous species of Cryptobia and Lathrobia does not appear to be identified in any particular or peculiar way with that of the ants and they have no specialized structures, as is virtually always the case with true ant-guests.

The tribe Paederini is composed as far as known to me at present of twelve subtribal groups, all of which occur within the geographical limits of this revision except the two marked by prefixed asterisks; these subtribes are distinguishable by the following characters: —

Prosternum abbreviated between and under the coxae, forming an acute point which does not attain the mesosternum........................ 2
Prosternum prolonged posteriorly in a more or less acute point which attains the mesosternum, but not much dilated under the coxae............ 9
Prosternum attaining the mesoternum and also greatly dilated laterally under the coxae as far as the inflexed sides of the pronotum — hypomera...10
2 — Antennae anteriorly flexile and strongly geniculate, the basal joint usually very much elongated and having an anterior sinus in its apical margin; anterior tarsi not dilated.................................. 3
Antennae posteriorly flexile, the basal joint less elongate and with a posterior apical sinus; anterior tarsi variable................................ 4

3 — Neck more or less broad; fourth palpal joint distinct, more or less conical.. **Cryptobia**

Neck extremely slender as in *Scopaeus;* fourth palpal joint indistinct, apparently obtuse and more or less pubescent..............***Sphaeronia**

4 — Ligula bilobed at tip; sculpture and vestiture never very dense; labrum never strongly dentate at the middle............................... 5

Ligula densely fimbriate at tip; labrum dentate only at the middle; sculpture and vestiture very dense, the surface devoid of lustre................ 8

5 — Fourth joint of the maxillary palpi compressed and lineate at apex and clothed with fine pubescence.. 6

Fourth palpal joint conical, sometimes aciculate, always nude........... 7

6 — Neck very broad; body feebly convex; hind tarsi filiform...***Dolicaones**

Neck narrow; body strongly convex; tarsi with the fourth joint lobed beneath..**Paederi**

7 — Anterior tarsi always strongly dilated in both sexes, the posterior filiform and simple; body more or less parallel as in Dolicaones and moderately convex as a rule....................................**Lathrobia**

8 — Body more or less parallel and feebly convex; anterior tarsi variable...**Lithochares**

9 — Ligula loosely fimbriate at tip; neck never very slender.......**Medones**

Ligula tricuspid at tip; neck variable but never very broad.........**Scopaei**

10 — Prosternum remaining far below — viewed from below — the level of the edges of the hypomera, with a widely open space between the two surfaces; tarsi filiform, the fourth joint simple; antennae as in Paederi; neck very slender...**Stilici**

Prosternum approaching very close to the edge of the hypomera in a vertical sense, the opening between them narrow but evident; tarsi short and stout, the fourth joint bilobed; antennae straight, not flexile at the first joint, the apex of the latter not sinuate behind; neck very slender...**Stilicopses**

Prosternum touching or connate with the edges of the hypomera, the coxal cavities entirely chitinous......................................11

11 — Fourth tarsal joint bilobed; antennae straight, not flexile at the first joint, the apex of which is not sinuate behind; mentum simple; maxillary palpi slender, the third joint elongate and fusiform, the fourth small, obtuse and inconspicuous; neck moderately narrow; integuments moderately dense; species small in size.........................**Sunii**

Fourth tarsal joint simple; antennae flexile, the apex of the first joint sinuate posteriorly; mentum usually modified at the sides, sometimes spinose; third joint of the maxillary palpi more or less securiform or otherwise abnormal, the fourth very minute and indistinct; neck usually very slender; integuments thicker and much denser; species generally very small in size...**Echiasteres**

In the following pages 89 genera are defined in the tables of genera, of which 64 occur within the limits of the United States of America and 25 are exclusively foreign; these latter are distinguished in each case by a prefixed asterisk.

It would be a source of the greatest satisfaction if typical examples of all the American genera described by Dr. Sharp could have been procured, not only for the purpose of arranging them in proper succession with the others, but especially in order to avoid the possible redescription of some of them from our southwestern regions under new and unnecessary names, but this was found to be impracticable and recourse was had to inferences derived from the rather too short diagnoses and poor figures of the "Biologia." * It is probable however that but few synonyms will be found among the genera. It seems scarcely necessary to repeat, in view of what I have already published (Annals N. Y. Acad. VII, p. 353), that *Liparocephalus* and related genera are in no way Paederids but belong to the Aleocharini.

CRYPTOBIA.

The components of this extensive subtribe are the most highly organized and actively predaceous of the Paederini and include some of the largest species of the tribe. They are very poorly represented in the western parts of the old world, extremely abundant and greatly diversified in North and South America and are moderately numerous in eastern Asia, to which regions they probably migrated from North America in rather remote geologic time, for at present the Asiatic genera are all different from those of North America. Their close relationship with the Lathrobia is shown not only by general organization and prosternal structure, but especially by the occurrence of a pleural fold on the elytra, the origin and meaning of which are rather obscure. The absence or modification of this fold in the present subtribe is accompanied by so many peculiarities of habitus or specialized structure as to indicate its really important nature from a generic standpoint, and I have therefore used it as one of the primary criteria both here and in the Lathrobia, where it apparently loses none of its significance. In the Cryptobia the fold is present as a rule and its absence is the exception, while the reverse is the case in the Lathrobia, there being more species in the latter without than with this plication. The anteriorly flexile antennae, with greatly elongate basal joint, and the undilated anterior tarsi, are the only important characters distinguishing the Cryptobia from the Lathrobia, the large conical glabrous fourth palpal joint being common to the two, but in the table of subtribal groups it is necessary for convenience to separate them by a few subtribes having the fourth joint completely different in form, being compressed and finely pubescent. This difficulty of course arises from the practical necessities of a lineal succession in the grouping. The genera represented by material in my cabinet may be defined as follows: —

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* My failure to secure the rich and varied collection of Staphylinidae brought home from Brazil by Mr. H. H. Smith, was one of the greatest disappointments of my scientific career, for this copious material contains examples of nearly all the tropical American genera, besides a large proportion of the remarkably diversified species of those regions, as I inferred from mounting nearly a thousand specimens forming a sample lot placed in my hands by Mr. Smith for examination. These specimens are probably at present in the Carnegie Museum at Pittsburg with the Smith collection.

Gular sutures separated; maxillary palpi coarsely and very sparsely setulose; pleural fold when present never united with the side margin posteriorly 2
Gular sutures united throughout their length from the small triangular postmental piece; third palpal joint finely and closely pubescent; pleural fold gradually becoming fused with and forming part of the side margin posteriorly 12
2 — Elytra with a pleural fold near the side margin 3
Elytra without trace of a pleural fold 7
3 — Pleural fold entire, extending from the humeri to the outer angle of the elytra 4
Pleural fold incomplete 6
4 — Neck entirely unconstricted on the upper and lower surface, feebly constricted at the sides, very broad and but slightly narrower than the widest part of head, the latter elongate and rather depressed, but little narrowed before the eyes which are moderate in size and anterior in position; two post-ocular setigerous punctures — characterizing most of the genera — wholly obsolete; labrum short, edentate, feebly and biobliquely truncate, with a small median sinus; lobes of the ligula large, obtriangular, apparently connate throughout their length, membranous, the basal part corneous; mentum large, trapezoidal, with more than apical half coriaceous, unimpressed at base; gular sutures more widely separated than usual, straight and only very slightly converging

to the base, the basal part of the intermediate surface elevated above the general level; basal joint of the antennae shorter than usual, being scarcely one-half as long as the width of the head; prothorax slightly broader near the base than at apex; elytra longer and wider than the prothorax, parallel; abdomen as wide as the elytra, conically tapering from the apex of the fourth segment; legs moderate, the tibiae strongly spinulose, the hind tarsi long and slender with the basal joint almost as long as the next two combined and much longer than the fifth; integuments smooth, polished and sculptureless above, except the basal parts of the head and the abdomen, which are feebly micro-reticulate, the head and pronotum rather finely, very sparsely punctate, the elytra with widely separated even unimpressed series of extremely fine feeble setigerous punctures. Brazil............................ ***Aderobium**

Neck distinctly and abruptly constricted across the dorsal surface; sculpture strong and distinct, the punctures simple...................... 5

5 — Antennal joints not constricted at base, obconical, shorter and broader toward tip; elytral suture strongly beaded. Body parallel, moderately convex, moderate to large in size; head oblong, parallel, inflated or narrowed behind the eyes which are well developed, finely faceted, more or less prominent and anterior, the post-ocular foveolae well developed; neck broad, three-fifths to three-fourths as wide as the head, the basal angles of the latter only very rarely obliterated; mandibles tridentate within, the two lower teeth on a broad common base and equal in size, more developed on the left mandible; labrum edentate, short, biobliquely truncate with a shallow rounded median sinus; basal joint of the antennae relatively very moderate in length, not as long as the next three combined; gular sutures fine, becoming very approximate behind the middle; lobes of the ligula rounded, coriaceous or membranous, separate; mentum trapezoidal, large, feebly convex, coriaceous in apical half; prothorax rather small, oblong, always narrower than the head; elytra greatly developed, always longer and wider than the prothorax, usually elongate; abdomen seldom quite as wide as the elytra, the sides parallel, the segments feebly impressed at base; legs moderately long, slender, the hind tarsi elongate with the basal joint usually distinctly shorter than the next two combined but about as long as the fifth. Male with the subbasal ventral segments modified by discal foveae or short transverse setose furrows, the third segment lobed in the middle at apex, the lobe very variable. North and South America.. **Gastrolobium**

Antennal joints not constricted or compressed at base, the elytral suture strongly beaded. Body parallel or anteriorly attenuate, moderately convex; head oblong, parallel, inflated or gradually narrowed behind the eyes, sometimes notably small, the neck broad, three-fifths to three-fourths as wide as the head, the basal angles rounded to the neck or obliterated; mandibles bidentate within; eyes moderately large, anterior, more or less prominent, the facets fine and feebly convex; labrum short, biobliquely truncate, edentate, with a small shallow rounded median sinus; basal joint of the antennae elongate, as long as the next three or four combined; post-ocular setigerous punctures well developed; gular sutures fine and feeble, narrowly separated, most approximate well behind the middle; lobes of the ligula rounded, separate, coriaceous, their basal parts corneous as usual; mentum large, trapezoidal, obliquely tumid at each side, coriaceous in less than apical half; prothorax oblong, larger than in *Gastrolobium;* elytra parallel, generally longer and wider than the prothorax; abdomen as wide as the elytra or nearly so; legs moderately long and slender, the tibiae not strongly spiculose, the hind tarsi rather long, with the basal joint much longer than the second but not as long as the next two combined and but little longer than the fifth. Male without modification of the subbasal ventrals. Temperate North America................**Hesperobium**

Antennal joints compressed and constricted at base; elytral suture not beaded. Body stout, parallel, moderately convex, finely and densely punctured; head well developed, as in *Hesperobium* throughout, except that the median emargination of the labrum is larger, deeper and triangular in form; submembranous lobes of the ligula shorter, more diverging and quadrate; mentum very much shorter and more transverse, unimpressed, with only the anterior margin coriaceous, the dividing line being broadly sinuous; gular sutures, neck, prothorax and elytra similar; abdomen as wide as the elytra, parallel, the segments similarly feebly impressed at base; legs much more elongate, moderately stout, the basal joint of the hind tarsi as long as the next two combined and much longer than the fifth. Southeastern Europe.....***Homoeotarsus**

6 — Elytral suture not beaded, the surface not at all impressed along the suture; pleural fold beginning well behind the humeri and not extending to the hind angles; legs moderate in length, rather stout, the tibiae with numerous spicules among the setae; hind tarsi nearly as in *Hesperobium;* prothorax oblong, the elytra longer and wider as in the preceding genera; abdomen rather narrower than the elytra, the segments not impressed; pronotum shining, with rather coarse, circular and very shallow punctures separated by about their own widths, each puncture composed of a small central ring bearing a hair, the ring surrounded by a circle of minute punctules; elytra dull in luster but wholly sculptureless, finely, closely, irregularly punctured, each puncture consisting of an aggregation of minute polished punctules; abdomen finely, not densely punctulate, the surface micro-reticulate. Brazil..***Eucryptina**

Elytral suture strongly beaded, the surface broadly impressed along the beading; pleural fold beginning at basal third or fourth and extending to about apical fourth of the elytra; punctures throughout sparse, simple and impressed, those of the elytra very coarse; head narrow and elongate, the sides feebly, evenly arcuate and strongly converging behind the eyes to the neck, which is less than half as wide as the head, the basal angles obsolete; eyes normal; front not greatly reduced in width; basal joint of the antennae very elongate; labrum rectilinearly and transversely truncate, edentate, with a small parabolic median sinus wider than deep; mandibles long, evenly arcuate, very slender and extremely gradually and finely aciculate toward tip, having within two large acutely pointed teeth near the middle, the inner margin thence to the base with a narrow membranous margin which is fimbriate with short setae; membranous lobes of the ligula narrow, diverging, somewhat pointed; mentum short, coriaceous only along the anterior margin, the corneous part strongly, circularly impressed at base; prothorax narrowed anteriorly from near the middle, elongate, convex; prosternum much longer than usual before the coxae; gular sutures, elytra and abdomen nearly as in *Hesperobium;* legs long and very slender, very sparsely setulose, the basal joint of the hind tarsi as long as the next two combined and very much longer than the fifth; integuments throughout highly polished. Southeastern States of America...... **Lissobiops**

7 — Labrum edentate; eyes situated near the middle of the head, the sides behind them rapidly narrowed and evenly arcuate to the neck which is relatively narrower than in *Hesperobium*........................... 8

Labrum bidentate; body much smaller in size and generally very slender. 9

8 — Body large and stout, the abdomen inflated, arcuate at the sides and wider than the elytra; head and pronotum in the type minutely sparsely and very inconspicuously punctate, very dull and wholly lustreless because of extremely minute deep closely crowded punctules, each of which is shining at the bottom; elytra polished, sculptureless, with coarse impressed simple punctures irregularly disposed and moderately close-set; abdomen finely, rather sparsely punctulate, rather strongly micro-reticulate but shining; head large and greatly developed; labrum short, truncate, with a very minute and abruptly formed median notch, nearly as deep as wide and broadly rounded at the bottom, with its sides straight and but slightly diverging; mandibles very large and stouter than in *Hesperobium*, bidentate within, the inner edge thence to the base nude and without trace of the membranous fimbria of *Lissobiops*, the left mandible abruptly bent beyond the teeth, the right more evenly arcuate; eyes moderate, just before the middle, the two postocular setigerous foveae distinct, the surface between them elevated, subcarinate and laterally prominent; neck stout and but little narrower than the prothorax and only slightly more than half as wide as the head; basal joint of the antennae much elongated, longer than the width of the prothorax; membranous lobes of the ligula small, rounded; mentum moderate, coriaceous in apical half, not impressed basally, the apical margin arcuate; maxillary palpi long and extremely slender, the third joint six or seven times as long as wide, with perfectly rectilinear sides; gular sutures deeply impressed, very approximate slightly behind the middle; prothorax relatively small, oblong, parallel; prosternum well developed before the coxae, transversely impressed posteriorly; elytra large, parallel, wider than long; abdominal border broad, inclined, the segments impressed at base toward the middle, the third and fourth with a median longitudinal carina crossing the impression; legs long, rather slender, polished and sparsely setulose, the anterior tibiae densely clothed with stiff fulvous hairs in apical half; posterior tarsi long, rather stout, the basal joint almost as long as the next three combined and very much longer than the fifth. Central and South America... * **Pycnocrypta**

Body moderate in size and convexity, fusiform; punctures throughout simple and small in size; head relatively small in size, the eyes well developed, prominent, slightly behind the middle of the length, the frontal part of the head before them greatly reduced in width; postocular foveolae small, the surface between them feebly tumid and not laterally prominent; neck about half as wide as the head; basal joint of the antennae longer than in *Hesperobium* but relatively shorter than in *Pycnocrypta;* labrum short, strongly, biobliquely truncate, with a broad shallow rounded median sinus; mandibles slender, finely aciculate apically, evenly and equally arcuate, tridentate within, the outer tooth longer and more aciculate than the other two which are equal; membranous lobes of the ligula rather pointed; mentum large, trapezoidal, coriaceous in apical third, the dividing line transverse and rectilinear; palpi as in *Hesperobium*, the gular sutures rather less approximate but similar in form; prothorax moderate, somewhat narrowed apically, the prosternum long, well developed and unimpressed before the coxae; elytra longer and wider than the prothorax, very feebly impressed along the suture which is scarcely at all beaded; abdomen rather narrower than the elytra, uninflated, the segments not much impressed at base; legs rather long and very slender; hind tarsi with the basal joint as long as the next two. Southeastern States of America........**Biocrypta**

9 — Neck more than half as wide as the head; eyes submedian in position. 10

Neck much narrower, distinctly less than half as wide as the head; eyes anterior in position.. 11

10 — Body subparallel, moderately slender and convex, strongly and simply punctate, the integuments shining, feebly micro-reticulate, the elytra not minutely sculptured; head moderately developed, the eyes at or slightly behind the middle, the sides parallel behind them to the broadly rounded basal angles; base broadly arcuate-truncate; post-ocular foveolae apparently wanting; neck fully three-fifths as wide as the head; frontal parts before the eyes conspicuously narrower; labrum transversely, rectilinearly truncate, with a small rounded emargination between the teeth; basal joint of the antennae moderate, as long as three-fourths the width of the head, the last joint short truncate and spongiose at tip; lobes of the ligula small, rounded; mentum biobliquely tumid, the apex strongly rounded and coriaceous; gular sutures becoming extremely approximate posteriorly to the base; prothorax about as wide as the head, the sides converging from the rounded apical angles to the base; elytra about as long as the prothorax and wider; abdomen parallel, about as wide as the elytra, the segments feebly impressed at base; legs short but slender, the hind tarsi short, with the basal joint as long as the next two but subequal to the fifth. Panama......***Cryptobiella**

Body fusiform, slender, rather convex; integuments polished and wholly sculptureless, strongly but not densely, simply punctate; abdomen minutely reticulate and punctulate; head narrow and elongate, moderately narrowed before the eyes, the latter obliquely truncate posteriorly, situated at or just before the middle of the length, the sides behind them converging to the very narrowly rounded basal angles; neck three-fifths as wide as the head; post-ocular foveolae apparently wanting; labrum, palpi and mentum as in *Cryptobiella;* gular sutures rather well separated, straight and parallel, diverging anteriorly and near the base; basal joint of the antennae as long as the next three combined, and though only moderately elongate, nearly as long as the width of the head; prothorax oblong, with the sides parallel and arcuate, wider than the head; elytra wider than the prothorax, with the suture beaded;

abdomen narrower than the elytra; legs slender, the hind tarsi long, only slightly shorter than the tibiae, the basal joint not quite as long as the next two but longer than the last. Europe...............***Cryptobium**

11 — Form narrow, subfusiform, the head small and much narrower than the elytra, only feebly convex, the integuments polished and devoid of minute sculpture throughout, the punctures moderate in size, not very close-set and simple; head oblong, the sides parallel or feebly converging behind the eyes to the broadly rounded basal angles, moderately narrowed before the eyes, which are rounded behind, prominent and situated well before the middle; post-ocular areolae distinct, the surface between them sometimes tumid; labrum nearly as in *Cryptobium;* basal joint of the antennae moderate; neck barely two-fifths as wide as the head, mentum trapezoidal, coriaceous only at apex, deeply impressed along the basal margin; gular sutures becoming extremely approximate behind the middle; prothorax very narrow and elongate-oval, parallel, much narrower than the head; elytra almost twice as wide as the prothorax and very much longer, notably elongate, parallel, the suture strongly beaded; abdomen narrow, the segments feebly impressed at base; legs rather short, very slender, the hind tarsi notably short, the first and fifth joints subequal in length and much longer than the others which are relatively more elongate than usual. Southern North America...**Ababactus**

12 — Body parallel, rather convex, more or less densely and coarsely but simply punctate; head oblong-elongate, usually parallel at the sides, with broadly rounded basal angles; neck broad, about three-fifths as wide as the head; eyes well developed, convex and prominent, situated distinctly before the middle of the length; basal joint of the antennae as long as the next four combined, the joints not constricted at base; labrum short, truncate, bidenticulate, the teeth separated by a rounded and rather shallow median sinus of moderately large size; post-ocular foveolae large and well developed, rather approximate, the surface between them longitudinally tumid; membranous lobes of the ligula narrow, well separated, arcuate toward each other, the basal parts corneous as usual; mentum large, trapezoidal, flat, the apical part coriaceous, the dividing line posteriorly arcuate; second maxillary palpal joint sparsely setulose, the third rather longer than the second, moderately stout, obconical, with the apex slightly narrowed, the surface dull in lustre, finely and closely pubescent, the fourth joint smaller than usual, acutely conical; prothorax oblong, parallel, narrower than the head; elytra parallel, wider than the head and usually longer than the prothorax, the suture strongly beaded; abdomen parallel, nearly or quite as wide as the elytra, the segments distinctly impressed at base; legs slender, moderate in length, the hind tarsi long, slender, of the usual form, the basal joint as long as the next two and longer than the fifth. Japan ....***Monocrypta**

The majority of the above genera being foreign to our territories, it is necessary to remark upon those thus indicated above before proceeding further: —

ADEROBIUM n. gen. — The structure of the basal parts of the head, short basal joint of the antennae and type of elytral sculpture, isolate this genus completely; it is founded upon the Amazonian *Cryptobium angustifrons*, of Sharp.

HOMOEOTARSUS Hochh. — The remarkable structure of the antennal joints and absence of any well-defined beading of the elytral suture, as well as some minor structural features, such as the form of the mentum, will readily serve to separate this genus from *Hesperobium*, which it strikingly resembles in facies and general organization. The type is *H. chaudoiri* Hoch., a male of which from Lenkoran is before me. The sexual characters are peculiar, the fifth ventral being feebly impressed in the middle and with a very abruptly formed median emargination at the transversely rectilinear apex, the emargination almost exactly circular in form, the opening being narrower than its greatest width; the emargination of the sixth ventral is somewhat as in our *Hesperobium cinctum* Say. It has been stated that the genus *Spirosoma* Mots. — Bull. Mosc. 1858, p. 206 — described from India, is the same as *Homoeotarsus*, but the statement that the tarsi are one-half shorter than the tibiae, with the first four joints triangular and equal, the last as long as the two preceding combined, would seem to indicate generic difference, for even if the tarsus referred to be the anterior, it would not be true of *Homoeotarsus*, where the basal joint is still notably longer than the second. It is also said of *Spirosoma* that the second and third antennal joints are equal in length, the fourth shorter, whereas in *Homoeotarsus* the second joint is much shorter than the third and equal to the fourth.

EUCRYPTINA n. gen. — This genus is founded upon the Amazonian *Cryptobium opacum*, of Sharp, and is described above from a single headless specimen. As the peculiarities of the elytra, referred to in the description, are of generic value, this mutilation is not so important, but the cephalic characters are doubtless also distinctive. There is no trace of the sutural beading and juxta-sutural impressions so charateristic of *Hesperobium*.

PYCNOCRYPTA n. gen. — The type of this genus is one of the most remarkable Paederids that I have observed. It is very large in size, stout in form, deep black in color throughout the body, legs and antennae, the head and pronotum opaque and with minute sparse punctulation, the elytra one-half wider than the prothorax and equal to the latter in length, equal in width to the head, parallel, with distinctly angulate and broadly exposed humeri, polished surface and coarse deep and rather close-set, irregularly disposed punctures; they are shorter than wide, broadly, feebly impressed toward the suture, with the sutural bead distinctly elevated. The abdomen is remarkable in form and size, as may be inferred from the generic diagnosis. This species — which was named *Crypt. maxillosum* by Guérin, — measures 15.0 by 3.5 mm. in size. The type was given to me by Dr. Geo. W. Bock, of St. Louis, and was collected by him near Guatemala City. *Pycnocrypta* will include also several other large Central and South American forms with broad and inflated abdomen, though differing in great degree from *maxillosa* in sculpture of the anterior parts, — such as the Amazonian *gigas* and *plagipennis* and the Mexican and Central American *ducalis*, *grandis* and *planata*, of Sharp.

CRYPTOBIELLA n. gen.* — This is one of the small slender

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* I would include in this genus, until its status can be more accurately determined, a species named *Cryptobium pusillum*, by LeConte. This is not before me at present, but some notes and a manuscript drawing taken from the original type many years ago, show that it is narrow, slender, of parallel, compact build, dark rufo-piceous in color, with the pronotum and abdomen less dark, the head not quite as wide as the elytra and but little longer than wide, rather abruptly and strongly narrowed before the eyes which are moderate in size and somewhat prominent, the sides parallel behind them for a short distance, then broadly rounded to the neck, which is rather less than half as wide as the head, — according to the drawing, — the punctures very coarse, deep and close-set throughout, almost mutually contiguous. The prothorax is longer than wide, narrower than the head, with the anterior angles distinct, the sides feebly converging and nearly straight thence to the base, rather closely, coarsely punctate, with a wide, impunctate area bounded by series. The elytra are scarcely as long as wide, parallel, distinctly shorter and much broader than the prothorax, more finely and closely punctate, the punctures subserial toward the suture. Antennal scape as long as the next four joints combined. Male with a small canaliculate impression at the middle of the apex of the fifth ventral, the sixth with a deep parallel cleft three times as deep as wide. Length 5.0 mm.; width 0.8 mm.

types allied to *Cryptobium* in its bidentate labrum, obsolete pleural fold and other structural characters, but is much more strongly and compactly built than either that genus or *Ababactus*. It is founded upon a species sent to me from Colon, in Panama, by Mr. Beaumont, of parallel and moderately slender form, deep black color, with a fine apical border of the elytra and apices of the fifth and sixth abdominal segments testaceous, the antennae pale, the legs extremely pale flavo-testaceous throughout. The head is equal in width to the apical part of the prothorax, and, together with the latter, rather coarsely, deeply and moderately closely punctured; the elytra are rather longer than wide, parallel, much wider than the prothorax and of equal length, less coarsely and still more closely punctured than the anterior parts and distinctly impressed along the strong sutural beading. The abdomen is finely, not densely punctulate and shining like the rest of the surface. Its dimensions are 5.3 by 0.88 mm., and it may be named *colonica* n. sp. It is allied closely to the Central American *Crypt. rostratum*, of Sharp, differing in its rather smaller size, polished abdomen and other minor points and the genus will include also the Amazonian *triste*, of Sharp.

CRYPTOBIUM Mann. — The two or three European species constituting this genus are of small size and more or less slender form, with the head notably narrow and elongate, differing from *Ababactus*, to which it is most closely allied, in that respect, as well as in its broader prothorax and smaller elytra, more elongate tarsi, less approximate gular sutures and many other characters of more or less importance. The surface is polished and devoid of minute sculpture, the punctures not very coarse and notably sparse, except on the elytra, where they are close-set and arranged without order. The surface of the elytra is impressed along the rather fine but distinctly elevated sutural bead. The basal joint of the antennae is about as long as the next three joints combined. The prosternum is circularly emarginate throughout the width at apex, with an exposure of whitish membrane — more or less evident throughout the subtribe.

MONOCRYPTA n. gen. — The completely united gular sutures, forming a coarse and cleft-like stria extending to the extreme base of the head, and more densely pubescent or setulose third palpal joint, are characters which isolate this genus completely, and it is without any very close allies known to me. The general habitus of *Monocrypta* is however not unlike that of several of our common forms of *Hesperobium*. The generic diagnosis is taken from the Japanese *Cryptobium apicatum* and *pectorale*, of Sharp.

Gastrolobium n. gen.

This is by far the most extensive and widely distributed genus of the American Cryptobia and includes some of the largest species. It is abundantly represented in temperate and tropical North and South America but has not yet occurred in the true Pacific coast fauna of North America, a significant fact when comparing the American and Asiatic types of the subtribe. The elytral punctures generally have but feeble indication of serial order, but in some cases, such as *lugubre*, the series are almost perfectly regular, constituting one of the most conspicuous features. The basal joint of the antennae is only moderately long when compared with other genera of the subtribe, being greatly surpassed in length by *Hesperobium* and, to a still greater degree, by *Lissobiops* in that respect. The male sexual characters are more elaborate than perhaps anywhere else in the Paederini, and the lobation of the third ventral segment is a character distinctive of, if not peculiar to, this genus. In at least one Amazonian species this singular lobe is strongly bilobed and there are doubtless many other remarkable modifications. The hind trochanters in the male of another species brought home from Brazil by Mr. H. H. Smith, are greatly prolonged and spiculiform, but I have remarked no such sexual character among our species. The lobe of the third ventral* is not constant in size but

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* This is described as the fourth segment by Dr. Horn in his revision of *Cryptobium* (Tr. Am. Ent. Soc., XII), he having mistaken the elevated basal margin of the first segment for a basal segment partially concealed by the coxae, and all the figures of the plates accompanying that paper are erroneously drawn in this respect. As illustrating the true structure of the

diminishes in less developed males and is completely obsolete in others, leaving only the peculiar discal foveae or short transverse setose folds of the second and third segments. The female has the abdomen entirely unmodified as a rule, but in *badium*, *bicolor*, *parallelum* and some others, the discal mark of the second segment — a fovea in some or a transverse fold in others — seems to remain in that sex. The sixth ventral of the male is obtusely rounded at tip or subtruncate. *Gastrolobium* differs very much from *Cryptobium*, under which name all the species have been described thus far, in structure and habitus. The species represented in my cabinet may be identified as follows: —

Head parallel, inflated or moderately narrowed behind the eyes, the basal angles always more or less evident and broadly rounded............ 2
Head gradually narrowed behind the eyes, the sides converging from the latter to the neck and evenly, feebly arcuate throughout, the basal angles wholly obsolete...24
2 — Elytral punctures close-set, never more than feebly and partially serial in arrangement.. 3
Elytral punctures sparse, very coarse, arranged in even series. 23
3 — Elytra generally pale, rarely black, never pale at tip.................. 4
Elytra black, with a fine, abruptly pale testaceous apical margin...........22
4 — Pronotum highly polished, without minute ground sculpture of any kind.. 5
Pronotum alutaceous in lustre, the dullness caused by excessively minute close-set and regular punctulation, only distinct under comparatively high amplification..21
5 — Head black or piceous-black in color.................................. 6
Head pale and concolorous with the prothorax and elytra.................16
6 — Prothorax black or piceous-black in color............................ 7
Prothorax paler in color and generally concolorous with the elytra....... 9
7 — Head parallel and straight at the sides for one and one-half times the length of the eye behind the latter, the sides thence broadly rounded to the neck. Body moderately large and stout, deep black throughout, the abdomen feebly rufo-picescent; legs very pale, the antennae dusky; head longer than wide, narrower than the elytra in the female, coarsely, closely punctate, the ridge between the post-ocular foveae very pronounced; prothorax oblong-elongate, parallel, with the sides nearly straight, much narrower than the head, the punctures unusually coarse, moderately sparse; elytra slightly elongate, two-fifths wider and nearly a third longer than the prothorax, parallel, the sides straight,

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abdomen the reader is referred to some remarks upon this subject published many years ago by the writer (Bull. Cal. Acad. Sci., II, 1886, p. 159 and plate).

the punctures coarse, rather close-set and irregular in arrangement; abdomen but slightly narrower than the elytra, sparsely but distinctly punctulate, each segment with a large shallow fovea at base and lateral fourth or fifth. Male unknown; female with the abdomen completely unmodified, the sixth ventral obtusely and transversely arcuato-truncate at apex. Length 10.0 mm.; width 1.6 mm. Virginia (Norfolk).......... ....**virginicum** n. sp.

Head narrowed behind the eyes, the sides converging from the latter to the very broadly rounded and subobsolete basal angles and but slightly arcuate.......................... 8

8 — Form rather stout, piceous-black throughout; the abdomen not paler at tip, the legs very pale, the antennae dusky except toward base; head longer than wide, much narrower than the elytra, coarsely, deeply and closely punctured; prothorax rather short, but little longer than wide, much narrower than the head, the sides parallel and almost straight, the punctures notably coarse, deep, moderately sparse, unevenly disposed; elytra parallel, about a fifth longer than wide, nearly one-half wider and two-fifths longer than the prothorax, rather coarsely, deeply and closely punctate, the punctures obscurely serial except toward apex; abdomen distinctly narrower than the elytra, strongly, not densely punctulate. Male with a transverse setose discal fold at the middle of the second and third ventrals, the folds equal in size and about an eighth as wide as the segments; lobe of the third segment obsolete in specimens at hand; sixth ventral very obtusely rounded at tip, becoming subtruncate toward the middle, the edge thinned and translucent, the surface notably convex toward the edge posteriorly; female not at hand. Length 9.4 mm.; width 1.5 mm. Florida to New Jersey..**floridanum** Lec.

Form less stout and rather more convex, the head black, prothorax piceous-black, the elytra dark rufous, the abdomen blackish, rufescent at tip; head longer than wide, subequal in width to the elytra, less coarsely and closely punctate; prothorax distinctly narrower than the head, much more elongate than in *floridanum* and nearly a third longer than wide, parallel and nearly straight at the sides, the punctures less coarse and about equally close-set; elytra much narrower and more elongate, parallel, two-fifths wider and a fourth longer than the prothorax, less coarsely but rather more closely punctate, the punctures without serial arrangement; abdomen almost as wide as the elytra, the punctures distinct and not close-set. Male with a very strongly developed transverse setose fold near the middle of the second and third segments, somewhat as in *floridanum*, the folds larger, nearly a sixth as long as the width of the segment; lobe of the third obsolete in specimens at hand; sixth segment narrower, obtusely rounded at tip, the surface cylindrically and transversely convex throughout, not at all convex toward tip; female unknown. Length 8.0 mm.; width 1.35 mm. New Jersey.
convergens Csy.

9 — Female with the abdomen wholly unmodified; male with a rounded discal fovea on the third, and a transverse fold on the second ventral. 10

Female with a short transverse setose discal fold near the middle of the second ventral, the third and remainder of the abdomen unmodified. 13

10 — Abdomen blackish, brightly rufescent at tip. Body moderately stout, polished, the head black; prothorax and elytra dark rufous; legs pale flavate, the antennae somewhat dusky rufous toward base; head large, longer than wide, parallel, arcuate and somewhat inflated behind the eyes especially in the male, where it is much wider than the elytra, only slightly wider than the latter in the female; tumescent posterior longitudinal ridge at each side distinct; punctures coarse and deep, moderately close-set; prothorax only slightly elongate, much narrower than the head, parallel at the sides, the punctures coarse and rather sparse; elytra unusually small in size, but little longer than wide, parallel and straight at the sides, equal in length to the prothorax in the female and rather shorter in the male and only a fourth or fifth wider, very coarsely, deeply, rather closely punctate, the punctures scarcely at all seriate, each elytron however with two approximate sets of series each enclosing a tolerably distinct smooth line; abdomen fully as wide as the elytra, sparsely and strongly punctulate. Male with an unusually long straight setose discal fold occupying median sixth of the second ventral, the third with a moderate circular setose fovea, the apical lobe parabolic, not extending quite to the apex of the fourth segment and one-third as wide as the apex, bristling with long setae, the sixth ventral conical, evenly, transversely convex, rather narrow at tip, the latter obtusely and broadly rounded. Length 10.5 mm.; width 1.55 mm. North Carolina and Maryland........................**carolinum** Er.

Abdomen uniform in color throughout..11

11 — Body and legs very pale flavo-testaceous in color throughout, the head black; abdomen very broad, fully as wide as the elytra. Form stout, parallel; head large, about as wide as the elytra, parallel and slightly arcuate at the sides behind the eyes, the tumescent lateral ridge feeble; antennae very slender, the seventh and eighth joints in the male about two and one-half times as long as wide, ninth not quite twice as long as wide; punctures rather coarse but decidedly sparse; prothorax slightly elongate, much narrower than the head, the sides parallel, somewhat arcuate anteriorly, the punctures moderately coarse, rather feeble and sparse; elytra only slightly longer than wide, parallel and straight at the sides, a fifth longer and one-third wider than the prothorax, the punctures notably coarse, deep, moderately close-set and subserial, the disk shaded slightly darker in color toward the suture; abdomen strongly, not closely, evenly punctulate. Male with a straight transverse setose fold occupying median seventh of the second ventral, the fovea of the third unusually large, a fourth or fifth as long as the entire segment; lobe completely obsolete in specimens at hand, the sixth ventral obtusely rounded at tip. Length 9.0 mm.; width 1.6 mm. Illinois...**atriceps** n. sp.

Body dark and more or less obscure rufous in color, the head darker; legs more or less pale flavate as usual, the antennae more or less infuscate; abdomen narrower than the elytra.................................12

12 — Form moderately stout, parallel; head not quite as wide as the elytra, the sides parallel and straight behind the eyes for some distance, then broadly arcuate to the neck; punctures rather coarse, deep and close-set, separated by scarcely their own diameters; prothorax much narrower

than the head, distinctly longer than wide, parallel, the sides feebly arcuate medially, the punctures coarse and rather close; elytra distinctly elongate, two-fifths wider and a third longer than the prothorax, coarsely, closely and confusedly punctured, the punctures decidedly smaller toward the sides and tip; abdomen finely but strongly, rather closely punctate. Male with a short transverse straight and strongly setose fold behind the middle of the second ventral and occupying about median eighth to tenth of the width, the third with a moderate circular setose fovea before the middle, the lobe large, extending beyond the apex of the fourth, evenly rounded at tip and occupying more than median two-fifths of the width; sixth broadly rounded, the apical margin becoming just visibly sinuate at the middle. Length 8.4–10.5 mm.; width 1.22–1.6 mm. Texas (Houston, Austin and El Paso), Iowa (Keokuk), Indiana, Arizona (Tuçson) and California (Needles). **pimerianum** Lec.

Form and coloration similar to *pimerianum*, the punctuation less dense; head well developed, subequal in width to the elytra, parallel and with the sides feebly arcuate for some distance behind the eyes, then broadly rounded to the neck; punctures moderately coarse and not very close-set, separated, except at the sides, by fully twice their own widths; prothorax as in *pimerianum* but more sparsely and feebly punctate; elytra similar and similarly punctured but rather less closely, the abdomen also more sparsely punctulate above and beneath. Male with a transversely arcuate setose fold, much longer than in *pimerianum*, behind the middle of the second ventral and occupying about median sixth of the width; third with a rather larger and more transversely elliptical setose fovea, moderate in size, just before the middle, the lobe obsolete in specimens at hand. Length 10.5 mm.; width 1.6 mm. Iowa. [= *carolinum* Er. (Lec.) — erroneous determination]. .... **lecontei** Horn

13 — Abdomen black, the last two segments abruptly pale rufous. Body not very stout, the head black; prothorax and elytra bright rufous, the latter usually clouded with piceous toward the suture except at apex; legs pale; head parallel and feebly arcuate at the sides, the basal angles broadly rounded, not quite as wide as the elytra, the punctures rather coarse deep and close-set, separated by slightly more than their own widths; prothorax but slightly elongate, distinctly narrower than the head, parallel, only very slightly narrower at base than at apex, the punctures coarse, strong and rather close; elytra distinctly longer than wide, two-fifths to nearly a half wider and two-fifths longer than the prothorax, moderately coarsely and closely, irregularly punctate; abdomen slightly narrower than the elytra, strongly but not densely punctulate. Male with the setose fold of the second ventral occupying about median seventh, the rounded fovea of the third large, the lobe rather long and narrow, extending beyond the tip of the fourth segment and occupying scarcely more than median third of the width; sixth segment rather narrowly rounded at tip; fold of the second ventral in the female much smaller than in the male. Length 9.8 mm.; width 1.5 mm. New York to North Carolina and Iowa .... **bicolor** Grav.

Abdomen uniform in color throughout, sometimes very slightly paler at tip 14

14 — Body pale flavo-testaceous throughout, the head black. Head unusually small in size, very much narrower than the elytra, the sides parallel and straight, broadly rounded and converging at base to the the neck, the punctures strong and well separated; prothorax distinctly narrower than the head, only very slightly elongate, the sides subparallel, the punctures coarse, impressed, deep, irregular and moderately close-set; elytra unusually large, parallel, only slightly longer than wide, fully one-half wider and longer than the prothorax, the punctures much smaller than those of the latter, rather close-set and irregular; abdomen not much narrower than the elytra, rather coarsely, moderately closely punctulate. Male not at hand; female with the foveiform fold of the second ventral stronger than in *bicolor*. Length 9.0 mm.; width 1.65 mm. New York and Virginia (Newport News). **melanocephalum** Er.

Body dark piceo-rufous in color, the head black.......................15

15 — Head moderately large but not quite as wide as the elytra, the sides parallel and nearly straight for half the distance from the eyes to the neck, then gradually rounded and converging to the latter; punctures moderately coarse, deep and very close-set, separated by rather less than their own widths; prothorax much narrower than the head, the sides parallel and feebly arcuate, only slightly elongate, the base and apex equal in width; punctures rather coarse, deep, not very close; elytra distinctly elongated, parallel, two-fifths wider and longer than the prothorax, coarsely, deeply, closely and irregularly punctured; abdomen narrower than the elytra, rather finely, not densely punctulate. Male not at hand; female with the straight transverse setose fold of the second ventral occupying about a tenth of the entire width. Length 10.5 mm.; width 1.6 mm. New Jersey..................**badium** Grav.

Head larger, very nearly as wide as the elytra, the sides parallel and more or less arcuate behind the eyes, broadly rounding to the base; punctures not very coarse and separated by about twice their own widths; prothorax as in *badium* but with the punctures sparser and rather feebler; elytra shorter and broader, only slightly elongate, nearly one-half wider and a third longer than the prothorax, the punctures less coarse and distinctly less close-set, irregular throughout; abdomen much narrower than the elytra, the punctures finer and sparser. Male with the fold of the second ventral straight and occupying median sixth or seventh, the fovea of the third transversely elliptical and moderately large, the lobe narrow, parallel and elongate, extending beyond the apex of the fourth, evenly and strongly rounded at tip and occupying less than median third, the sixth small, narrow, obtusely rounded at apex; female with the fold of the second ventral nearly as in *badium*. Length 11.8 mm.; width 1.75 mm. Ohio, Iowa, Missouri and Texas. **strenuum** n. sp.

Var A — Similar to *strenuum* but smaller and more slender, the head not inflated behind the eyes, the sculpture throughout similar; prothorax notably smaller, still less elongate, with the sides strongly converging behind the middle, the base being much narrower than the apex; elytra narrower and more elongate, scarcely at all wider than the head. Male unknown; female with sexual characters nearly as in *strenuum*, the fold of the second ventral, however, smaller and about a twelfth or fifteenth as wide as the segment. Length 9.7 mm.; width 1.5 mm. Illinois.................................**illiniane** n. var.

Var B — Similar to *strenuum* but stouter, the head larger, fully as wide as the elytra, strongly inflated behind the eyes and rounded at the sides, similarly punctured; prothorax small, but little longer than wide, similarly sculptured, the base narrower than the apex as in *illiniane*, but to a much less degree; elytra distinctly elongate, much longer than in *strenuum* and more coarsely and somewhat more closely punctured; abdomen broader, very nearly as wide as the elytra, the punctures coarser and a little more close-set. Male unknown; female with sexual characters nearly as in *strenuum*. Length 10.5 mm.; width 1.8 mm. Texas.............................**spissiceps** n. var.

16 — Abdomen black or piceous, with the last two segments pale in color as in *bicolor*..17

Abdomen uniform in coloration throughout, pale or blackish in color....18

17 — Body rather stout, shining, pale red-brown in color throughout, the elytra sometimes feebly clouded with piceous toward the suture; legs very pale, the antennae infuscate; head well developed but not quite as wide as the elytra, the sides not inflated, parallel, and nearly straight behind the eyes, then broadly rounded to the neck; punctures only moderately coarse and well separated; prothorax slightly elongate, parallel, distinctly narrower than the head, the punctures rather coarse but not very close-set; elytra but slightly longer than wide, parallel, two-fifths wider and a third longer than the prothorax, the punctures rather coarse, wholly confused and moderately close; abdomen slightly narrower than the elytra, polished, finely, rather sparsely punctate. Male with the transverse fold of the second ventral short and broad, occupying about median tenth of the width, the fovea of the third large and circular, the lobe strongly rounded at tip, not extending quite to the tip of the fourth and occupying about median third; sixth segment narrow, evenly and broadly rounded at tip; female with the abdomen wholly unmodified. Length 10.5 mm.; width 1.65 mm. Texas (Galveston) to New Mexico (Albuquerque)...................**texanum** Lec.

18 — Abdomen blackish throughout dorsally, paler beneath; head rather small in size, very much narrower than the elytra, parallel and straight at the sides behind the eyes, the basal angles broadly rounded; punctures as in *texanum;* prothorax as in that species but less decidedly narrower than the head and with the punctures rather feebler; elytra distinctly elongate, much wider and longer than the prothorax, the punctures coarse, deeper and closer than in *texanum*, confused throughout; abdomen slightly narrower than the elytra, finely and not very closely punctured. Male not at hand; female having the abdomen wholly unmodified. Length 9.3 mm.; width 1.6 mm. Arizona...**ventrale** Horn

Abdomen pale in color throughout and concolorous with the remainder of the body...19

19 — Head very sparsely punctured even at the sides. Body not very stout, parallel, shining, pale red-brown in color throughout, the legs very pale and flavate; head well developed, elongate, only slightly narrower than the elytra, the sides parallel and nearly straight for two-thirds of

the distance from the eyes to the neck, then broadly rounded; punctures moderately coarse, deep, more distinct and perforate than usual, very sparse throughout, the lateral tumidity feeble; prothorax only very slightly longer than wide, distinctly narrower than the head, subparallel and very feebly arcuate at the sides, moderately coarsely, strongly, somewhat closely but irregularly punctate; elytra much elongated, two-fifths wider and a third to nearly one-half longer than the prothorax, the punctures moderately coarse, rather well separated, confused; abdomen distinctly narrower than the elytra, finely, sparsely punctulate. Male with the transverse fold of the second ventral long, about a sixth or seventh as long as the segmental width, the third ventral also with a setose transverse fold but shorter than that of the second, the lobe obsolete in specimens at hand; sixth obtusely arcuato-truncate at tip; female with a transverse setose fold on the second segment occupying median seventh or eighth of the width. Length 9.3 mm.; width 1.5 mm. New York (Long Island), New Jersey and North Carolina. [=*proximum* Csy.]..................**parallelum** Csy.

Head closely punctured, at least toward the sides......................20

20 — Third ventral of the male with a short transverse fold. Body moderately stout, parallel, pale and uniform red-brown in color throughout, the legs still paler and rather more flavate; head well developed, about as wide as the elytra, the sides parallel and more or less arcuate behind the eyes, then more broadly rounded to the neck, the punctures rather coarse, separated by scarcely more than their own widths toward the middle of the occiput, the lateral tumescent ridge — between the setigerous foveolae — strong; prothorax distinctly elongate, subparallel, much narrower than the head, the punctures rather coarse but impressed, not very close-set; elytra slightly elongate, much wider and longer than the prothorax, coarsely but not very closely punctate, the punctures confused, becoming sparser and subserial toward the humeral angles; abdomen much narrower than the elytra, finely and sparsely punctulate. Male with the transverse fold of the second ventral very small, shorter than that of the third ventral, the latter also small and occupying about median twelfth of the width, the lobe rounded, extending about to the middle of the fourth in the only male at hand and occupying median fourth of the width, the sixth ventral broadly arcuato-truncate at tip; female with the abdomen wholly unmodified. Length 11.0 mm.; width 1.7 mm. Arizona (Clear Creek Cañon) and Colorado (Cañon City), — Mr. H. F. Wickham.....**coloradense** n. sp.

Third ventral of the male with a small rounded fovea. Form rather more slender than in the preceding, similar in coloration, the sculpture finer and much denser; head rather depressed, not quite as wide as the elytra, the sides parallel for a short distance behind the eyes, almost evenly arcuate thence to the neck, the punctures notably small and close-set, the lateral tumidity feeble; prothorax distinctly elongated, subparallel, much narrower than the head, the punctures rather coarse, deep and moderately close-set; elytra longer than wide, more depressed than usual, much wider and longer than the prothorax, the punctures unusually small but deep and close-set, confused in arrangement, sparser and sublinear near the humeri; abdomen slightly narrower than

the elytra, the punctures fine and rather close. Male with a small but broadly impressed transverse fold near the middle of the second ventral, occupying about median twelfth or fourteenth of the width, the third with the small fovea not broadly impressed but unusually abrupt and perforate, the lobe large, parabolic, extending beyond the apex of the fourth and occupying fully median two-fifths of the width; sixth arcuato-truncate at tip; female with the abdomen wholly unmodified. Length 10.5 mm.; width 1.68 mm. Arizona (Nogales).
arizonense Horn

Var A — Smaller in size and of still narrower form, the head and elytra rather less depressed; head less elongate, with more pronounced basal angles and more prominent eyes; prothorax smaller, with smaller and feebler punctures; elytra similarly sculptured but rather narrower and more elongate; abdomen similar in the female. Length 9.0 mm.; width 1.45 mm. Lower California.....**peninsulare** n. var.

21 — Form rather stout, pale testaceous in color, the elytra still paler and more flavate, the suture broadly clouded with blackish-piceous, the abdomen infuscate or piceo-testaceous throughout; head only moderately elongate, almost as wide as the elytra, alutaceous in lustre, the sides very slightly converging behind the eyes, the basal angles broadly rounded; punctures not very coarse and decidedly sparse; prothorax parallel, much narrower than the head, only slightly longer than wide, strongly alutaceous, the punctures rather small in size but distinct, sparse; elytra distinctly elongate, parallel, fully two-fifths longer and wider than the prothorax, slightly alutaceous, the punctures not very coarse and rather close-set, confused but with two widely spaced close-set series on each elytron in less than basal half, the depression along the sutural bead also linearly punctate as usual; abdomen rather more shining than the anterior parts, slightly narrower than the elytra, finely, rather sparsely punctate. Male with a short, broad transverse fold behind the middle of the second ventral and occupying about median tenth or twelfth of the width, the fovea of the third circular, somewhat perforate and small in size, the lobe large, regularly ogival in outline, extending slightly beyond the apex of the fourth and occupying median two-fifths of the width; sixth obtusely rounded at tip. Length 7.8 mm.; width 1.35 mm. Texas................**suturale** n. sp.

Form more elongate, dark and uniform red-brown in color, the abdomen black with the apex slightly and indefinitely paler; legs very pale flavo-testaceous, the antennae infuscate; surface alutaceous, except the abdomen which is strongly shining; head rather small, much narrower than the elytra, the sides feebly converging and straight for some distance behind the eyes, the basal angles broadly rounding thence to the neck, the punctures only moderately coarse and not very close-set, rather uneven; prothorax distinctly elongated, narrower than the head, parallel, the punctures not coarse and rather feeble but distinct, more or less sparse; elytra longer than wide, rather convex transversely, much longer and wider than the prothorax, the punctures comparatively small and close-set, confused but with feeble traces of the two smooth longitudinal lines on each elytron formed by approximate series, which is a feature more or less obvious throughout the genus; abdomen narrower than the elytra, finely, sparsely punctate. Male with a transversely oval setose fovea of moderately large size only slightly behind the middle of the second ventral, the third with a much smaller discal fovea which is well defined and slightly longitudinally elliptical — an exception to the general rule, — the lobe rather small and obtusely pointed, scarcely extending to the apex of the fourth, its sides diverging to the base which occupies scarcely more than a fourth of the width; sixth segment rather strongly, evenly rounded; female with the abdomen wholly unmodified. Length 7.7–8.7 mm.; width 1.3–1.35 mm. Texas (Austin). [= *alutaceum* Fvl., i. litt.]....................**vagum** Horn

22 — Body small in size, moderately stout, deep black in color throughout except a fine apical border of the elytra and the legs, which are pale flavo-testaceous; antennae dusky-testaceous toward base; head very distinctly narrower than the elytra, oblong, only very slightly longer than wide, with the eyes unusually large and prominent and less anterior than usual, the sides behind them parallel or very feebly converging and straight to the rounded but unusually distinct basal angles; surface alutaceous as in the two preceding species, closely and finely punctate; prothorax slightly elongate, distinctly narrower than the head, parallel, polished, the punctures coarse deep and close-set; elytra slightly elongate, parallel, much wider and longer than the prothorax, the punctures but slightly less coarse than those of the pronotum and dense, arranged without order; abdomen much narrower than the elytra, alutaceous, finely and not closely punctulate. Male with a fine transverse setose fold at the centre of the second ventral, occupying median eighth or ninth of the width, the third also with a similar though slightly shorter and still finer setose discal fold, the lobe very broad and obtusely rounded, occupying nearly median three-fifths and not extending to the apex of the fourth; sixth broadly rounded at tip; female with the abdomen wholly unmodified, the sixth ventral truncate at tip, with the surface feebly ascending, paler and translucent at the edge. Length 6.8–7.5 mm.; width 1.2–1.28 mm. Florida to Texas (Brownsville).................. ....**despectum** Lec.

23 — Body very small, notably slender and parallel in form, dark testaceous and polished throughout, the legs pale flavo-testaceous; head well developed, distinctly elongate, a little wider than the elytra, parallel and straight at the sides, the basal angles more broadly rounded and the eyes smaller and less prominent than in *despectum*, the punctures coarse and rather sparse; prothorax distinctly elongate, parallel, narrower than the head, still more coarsely and nearly as sparsely punctate; elytra at least a fourth longer than wide, parallel, distinctly wider than the prothorax but only as long as the latter in the female and a little shorter in the male, the punctures relatively very coarse, not close-set, serial; abdomen scarcely narrower than the elytra, rather coarsely, unevenly and not densely punctulate. Male with a rather long and strongly setose fold well behind the middle of the second ventral, the third with a circular perforate discal fovea before the middle, the lobe obsolete in specimens at hand; sixth ventral obtusely rounded at tip; female with a very small transverse setose fold well behind the middle of the second

ventral — otherwise unmodified. Length 6.0 mm.; width 0.8 mm. Florida and Louisiana.......................................**lugubre** Lec.

24 — Form stouter than in *lugubre* but equally small in size, much less parallel, polished and deep black throughout, rather convex, the legs pale flavo-testaceous, the antennae black with the two basal joints rufous; head elongate, much narrower than the elytra, the eyes moderate in size and prominence, anterior; punctures sparse and moderately coarse; prothorax elongate, distinctly narrower than the head, the sides subparallel and feebly arcuate, slightly narrowed toward apex, the latter being sensibly narrower than the base; punctures rather coarse, not very close-set; elytra well developed, elongate, parallel, two-fifths wider and a third longer than the prothorax, the punctures moderately coarse and close-set and in great part serial in arrangement; abdomen much narrower than the elytra, the punctures strong but rather sparse. Male with a short transverse setose fold behind the middle of the second ventral, the third with a very minute discal fold, the lobe unusually narrow, rather acutely triangular, not extending to the apex of the fourth and occupying apical fifth or sixth of the width; sixth obtusely rounded at tip; female not at hand. Length 6.7 mm.; width 1.08 mm. Florida. [=*parcum* Lec.]..............................**obliquum** Lec.

The arrangement proposed above may not give a succession so truly in accordance with natural affinity as that based upon male structural modifications, but it is thought that the characters employed, together with variations of the color scheme, are sufficiently radical and constant to enable the student to place any specimen he may have at hand, irrespective of sex. It is possible, for example, that *parallelum* may be more closely allied to *floridanum* than to *coloradense* or *arizonense*, and it was probably by a hasty examination of the sexual characters alone, that Dr. Horn was led to the conclusion that it was identical with *floridanum;* the form, coloration and sculpture are, however, altogether different, and, other than the similarity in type of sexual characters, there is no close relationship between these two species. The name *proximum* was applied to one of those rather perplexing variations having the elytra less elongate, but it probably does not differ even subspecifically.

At Austin, Texas, I collected a very large series of the widely distributed *pimerianum*, in order to form an idea of the extent of specific variation and find that this is rather surprising and unusual, some of the very small depauperate individuals being proportionately more slender, with the head sensibly narrowing behind the eyes, so that they would seem to be almost subspecifically distinct, and, if seen in the extremes alone, might be considered specifically different; I notice the same variability, however, in specimens of *texanus* taken at Galveston.

The two species *anceps* and *vitatum* * of Horn, — the only other members of the genus thus far described — are not represented in the material before me, and I am therefore compelled to omit them from the table; the former seems allied to *floridanum* and the latter to *pimerianum*, but differs from this as well as all other of our species in coloration, being testaceous with the last two abdominal segments black, the usual rule in bicolored species being to have the last two ventrals paler than the others. *Anceps* is black, shining, with piceous abdomen, robust in form, with unusually large head, and, like *vitatum*, occurs in southern Arizona. *Convergens* is by no means identical with *floridanum*, as announced by Horn, the two species differing in the sexual modifications of the sixth ventral, the latter being singularly and exceptionally modified in *floridanum* as represented by New Jersey cotypes.

In this genus there are only two really distinct kinds or classes of males and not three as stated by Horn. The first kind has the lobe of the third ventral present in more or less developed degree, and the second has no vestige of lobe but retains the discal marks as perfectly developed as the first. There is apparently no other differential character, though the two classes of males probably play quite different roles in the life history of the species. If the lobe gradually diminished to complete disappearance, there would manifestly be but one class of males having a very variable appendage, but I have never seen an unlobed male presenting any trace of the lobe, and such traces would undoubtedly be seen occasionally if the lobe disappeared in that manner. We are therefore led to the conclusion that there is only a certain amount of variability in the lobe and that the unlobed males must constitute a distinct class of that sex — possibly infertile.

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* The significance of this specific name is somewhat obscure. Its repetition several times would seem to show that it is not a misprint for *vittatum*.

Hesperobium Csy.

The dentition of the mandibles will at once distinguish this genus from *Gastrolobium*, there being but two large elongate sharply pointed and much less unequal teeth, instead of the three teeth of the latter genus. The two teeth of the right mandible are clearly and evenly outlined throughout, but the lower tooth of the left mandible has a small shallow notch and vestigial tooth-like inequality of the edge far down on its lower side. The species, which are less numerous than those of *Gastrolobium*, differ considerably from the latter in facies, and, except in a few aberrant forms, in their sombre black or piceous coloration, longer basal joint of the antennae and type of male sexual modification, no trace of the folds, foveae or lobe of the second and third ventrals ever being observable. They appear also to be exclusively confined to temperate and boreal North America, not extending below the Mexican boundary and inhabit the entire country from the Atlantic to the Pacific, being the only genus of Cryptobia, except *Ababactus*, forming part of the true Pacific coast fauna. It is therefore the ancestral stem-forms of this genus, in all probability, rather than the preceding that, migrating in remote times to Asia by way of Alaska, have gradually become the present *Monocrypta*, *Spirosoma*, *Homoeotarsus* and *Cryptobium* of Asia and Europe. The species are tolerably homogeneous but *sellatum*, perfectly normal otherwise, differs greatly in its pale elytra, maculate with black, and *cribratum* and *rubripenne* in some features of form and coloration, as well as the pale, very coarsely and sparsely sculptured elytra, call to mind the remarkable type of *Lissobiops* to be described below. The various species may be distinguished by the characters given in the following table: —

Basal angles of the head more or less evident, the head more oblong; elytral punctures never very coarse, always close-set and never with more than a trace of serial arrangement at any part........................... 2

Basal angles of the head obsolete, the sides converging from the eyes to the neck and almost evenly arcuate; neck not more than three-fifths as wide as the head; elytral punctures extremely coarse, sparse and more or less distinctly serial in arrangement; surface polished throughout........13

2 — Body black or piceous-black in color throughout.................... 3

Body black, the elytra bright rufous, with an oblong sutural spot of black. 12

3 — Species of the Pacific coast.. 4

Species of the Atlantic regions.. 6

4 — Form stout, the body large in size, with the head strongly inflated and rounded at the sides behind the eyes, black, the elytra rufo-piceous, the legs pale, the antennae fuscous; head large and well developed though distinctly narrower than the elytra, rather coarsely, closely punctate, the eyes moderate in size but convex and prominent; neck but little more than half as wide as the head; prothorax distinctly narrower, slightly elongate, the sides somewhat converging and arcuate anteriorly, widest well before the middle, the punctures moderately coarse, deep and well separated; elytra but just visibly longer than wide, parallel, nearly one-half wider and a third longer than the prothorax, not very coarsely but deeply, rather closely and confusedly punctate; abdomen slightly narrower than the elytra, more finely but very strongly and rather closely punctate. Male with the fifth ventral broadly, feebly sinuato-truncate, the sixth with an abrupt deep emargination, one-half deeper than wide, with the bottom narrowly rounded, its edges with an irregular polished bevel as usual, the surface not impressed; female with the head notably narrower and slightly less inflated posteriorly, the sixth ventral broadly rounded at tip. Length 10.0 mm.; width 1.75 mm. California (San Joaquin Co.).....**tumidum** Lec.

Form more slender, the size smaller, the head never notably inflated behind the eyes, the sides straight, gradually rounding basally to the neck, the latter relatively broader, three-fifths as wide as the head............ 5

5 — Elytra evidently longer and very much wider than the prothorax, black, the elytra sometimes feebly picescent; head rather small, always much narrower than the elytra, moderately coarsely, deeply and rather closely punctured, the eyes moderately prominent; prothorax distinctly, though not very greatly, narrower than the head, much longer than wide, parallel, the sides feebly arcuate and somewhat converging anteriorly, the punctures moderately coarse and deep, confusedly aggregated along the median smooth space and toward the sides as usual; elytra in the male slightly, and in the female more distinctly, longer than the prothorax, fully two-fifths wider, slightly longer than wide, moderately coarsely, deeply, confusedly and very closely punctured throughout; abdomen shining, finely but strongly, rather closely punctate, slightly narrower than the elytra in both sexes. Male with the apex of the fifth ventral very distinctly but broadly sinuate in the middle, the sixth with a very deep, narrowly triangular notch, twice as deep as wide, with the angle rounded; female differing but little from the male in habitus or size of the head, the sixth ventral evenly and circularly rounded at tip. Length 8.0–9.3 mm.; width 1.4–1.55 mm. California (coast regions north of San Francisco).....**pacificum** n. sp.

Var A — Almost similar to *pacificum* but rather smaller, somewhat more depressed and parallel and with the head relatively a little larger, almost as wide as the elytra, the punctures rather coarse, deep and perforate, well separated; prothorax large, much longer than wide, with the punctures still sparser, the sides subparallel, broadly arcuate, the base a little narrower than the apex; elytra rather less elongate, distinctly wider and longer than the prothorax, the punctures coarser, deeper and less close-set, partially serial in arrangement toward base especially toward the scutellum; abdomen as wide as the elytra, otherwise similar. Male with the fifth ventral feebly sinuato-truncate posteriorly, much more feebly sinuate at the middle than in *pacificum*, the notch of the sixth more parallel-sided, nearly as in *Paederus*, fully twice as deep as wide. Length 8.3 mm.; width 1.38 mm. British Columbia................**vancouveri** n. var.

Elytra shorter than the prothorax and usually but little wider, the body more slender and much more parallel, black, the elytra somewhat piceous; legs pale, the antennae dusky; head longer than wide, as wide as the elytra, the eyes moderately prominent, the punctures strong, deep, moderately close-set; prothorax more or less distinctly narrower than the head, much longer than wide, the sides feebly converging toward base, broadly arcuate especially anteriorly, the punctures rather large, strongly impressed, not very close-set, aggregated as in *pacificum*, the aggregation along the smooth line usually broadly impressed posteriorly; elytra barely as long as wide, rather depressed, the sides feebly diverging as a rule, the punctures strong and close-set throughout, arranged without order; abdomen as wide as the elytra, finely but strongly, closely punctate. Male with the fifth ventral broadly, feebly sinuate toward the middle, the sixth with an abrupt and very deep triangular emargination, not quite twice as deep as wide, its angle broadly rounded; female differing but little from the male in general form, the sixth ventral very broadly, feebly arcuate at tip. Length 8.7 mm.; width 1.28 mm. Southern California and Nevada (Reno) to British Columbia...**californicum** Lec.

6 — Head inflated posteriorly, the sides behind the eyes parallel and distinctly arcuate; pronotum highly polished throughout, never alutaceous 7

Head not inflated posteriorly, the sides parallel or nearly so and usually straight for some distance behind the eyes........................... 9

7 — Male with the apex of the fifth ventral transversely and rectilinearly truncate, with a minute triangular tooth at the middle. Body moderately stout and convex, polished, black throughout, the legs pale, the antennae dusky; head but slightly longer than wide, equal in width to the elytra, the punctures coarse, deep and well separated; lateral tumid ridge strong; eyes scarcely at all prominent, almost entirely visible from above; neck wide, fully three-fifths as wide as the head; prothorax large, slightly elongate, not very much narrower than the head, parallel, the sides feebly arcuate; punctures rather coarse, impressed and somewhat close-set throughout, the median smooth area distinct; elytra but little longer than wide, only slightly wider and longer than the prothorax, parallel, not very coarsely but deeply, very closely and confusedly punctate; abdomen as wide as the elytra, finely, densely punctate, more minutely but rather less densely so beneath. Male with the fifth ventral unimpressed, the sixth with a large triangular notch much deeper than wide, with the angle finely acute and the edges broadly and gradually beveled, the adjoining surface anteriorly not much modified, nor-

mally pubescent and only very feebly impressed; female not differing much from the male, the head a trifle smaller, the sixth ventral broadly and very obtusely rounded at tip. Length 9.8 mm.; width 1.6 mm. Rhode Island to Iowa.............................. **pallipes** Grav.

Male with the apex of the fifth ventral truncate or feebly sinuate, not dentate 8

8 — Body large in size and stout, black throughout, the legs pale, the antennae dusky; head longer than wide, about as wide as the elytra, the eyes relatively small and only moderately prominent, the punctures strong and rather close-set; prothorax large, longer than wide, parallel, only slightly narrower than the head, the sides feebly arcuate: punctures rather small and moderately close, not so uneven in distribution as in the Pacific coast species; elytra quadrate, parallel, not longer than wide, equal in length to the prothorax in the male, a little longer in the female, about a fourth wider, the punctures rather small but strong, close-set and confused throughout; abdomen as wide as the elytra, finely, densely punctate above and beneath. Male with the fifth ventral feebly sinuato-truncate, the sixth with a large triangular emargination, as wide as deep, the angle acute, the surface in prolongation anteriorly broadly flattened, polished and glabrous; female differing but little, the sixth ventral broadly, feebly arcuate at apex. Length 11.0 mm.; width 1.85 mm. New York to North Carolina, Iowa and Missouri..**capito** Csy.

Body very much smaller, less stout and fusiform, rather convex, polished, the vestiture less conspicuous, black, the prothorax and elytra paler, rufo-piceous; legs and antennae pale flavous; head small, elongate, much narrower than the elytra, only slightly inflated behind the eyes, with the sides broadly arcuate, the eyes well developed but not very prominent, the punctures strong but uneven in size and well separated; neck nearly three-fourths as wide as the head; prothorax large, slightly longer than wide, very nearly as wide as the head in the male and wider than the latter in the female, parallel, with the sides broadly, evenly arcuate, the punctures sparse, moderately coarse, impressed; elytra barely as long as wide, parallel, as long as the prothorax and distinctly wider, the punctures small but strong, confused throughout and unusually well separated; abdomen as wide as the elytra, rather tapering behind the middle, finely, rather sparsely punctate throughout. Male with the fifth ventral evenly and almost rectilinearly truncate, the sixth with a large, evenly triangular emargination which, as in the two preceding species, occupies the entire width of the apex, its sides nearly straight, the angle obtuse, but not distinctly rounded, the notch more than twice as wide as deep, the surface adjoining anteriorly not impressed but with a small dull patch which is minutely and transversely rugulose; female differing but slightly, the sixth ventral narrower and obtusely rounded. Length 7.5–8.0 mm.; width 1.3–1.4 mm. New York ....**flavicorne** Lec.

9 — Pronotum alutaceous because of a very minute and regular micro-reticulation.. 10

Pronotum highly polished, without trace of minute sculpture of any kind; antennae normal... 11

10 — Antennae evenly and gradually incrassate throughout from the end of

the first joint. Body rather stout, only moderately convex, subfusiform, black throughout, the legs pale flavate; antennae infuscate, flavate at tip; head moderately small in size, much narrower than the elytra, the sides parallel behind the eyes for a short distance, the sides being almost evenly arcuate from the eyes to the neck; punctures rather coarse and close set; prothorax longer than wide, only very slightly narrower than the head, parallel, the sides feebly arcuate, the punctures small, rather feebly impressed and sparse; elytra slightly elongate, parallel, not very coarsely but strongly, confusedly and closely punctate, much longer and wider than the prothorax in both sexes; abdomen as wide as the elytra or slightly wider, the sides parallel and very feebly arcuate, the punctures strong and close-set, becoming coarse, scabrous and sometimes subconfluent toward the sides. Male with the fifth ventral unmodified, the sixth with a deep triangular notch nearly one half deeper than wide, with the angle obtusely rounded and the opening abruptly formed and half as wide as the apex; female not differing greatly from the male, the sixth ventral narrow, obtusely rounded at tip. Length 8.8 mm.; width 1.6 mm. New York to Wisconsin, Florida and Louisiana. [= *latebricola* Nord.] .... **cinctum** Say

Antennae rather slender and only just visibly increasing in thickness from the end of the first joint to the end of the sixth, the last five joints abruptly much wider, forming a loose parallel club. Body fusiform, moderately stout, black, the legs pale flavous, the antennae slightly fuscous, gradually paler toward tip; head small, elongate as usual, very much narrower than the elytra, the sides converging and evenly, strongly arcuate from the well-developed but only moderately prominent eyes to the neck, which is three-fourths as wide as the head, the lateral foveolae very deep and conspicuous; punctures coarse and close-set; prothorax slightly elongate, about as wide as the head in the female, the sides parallel and feebly arcuate, sometimes broadly angulate at the middle, the punctures rather small but conspicuous, somewhat sparse and impressed; elytra large, somewhat longer than wide, very much longer and wider than the prothorax, the punctures rather small but very deep and close-set, confused; abdomen as wide as the elytra, nearly as in *cinctum*, but less strongly sculptured. Male unknown; female with the sixth ventral rather narrow, the tip feebly arcuate. Length 8.0 mm.; width 1.5 mm. Florida (Lake Worth).

clavicorne n. sp.

11 — Form moderately stout, rather convex, only slightly fusiform, polished, deep black, the legs and antennae flavate; head small, distinctly elongate, very much narrower than the elytra, the sides parallel and straight for some distance behind the moderately large and convex eyes, then converging and more arcuate to the neck, the punctures less coarse than in *cinctum*, and twice as widely separated; prothorax large, longer than wide, parallel, with the sides evenly and moderately arcuate, slightly wider than the head, the punctures rather coarse, deeply impressed and widely separated; elytra but little longer than wide, slightly longer and wider than the prothorax, the punctures rather coarse, deep and close-set, confused in arrangement; abdomen about as wide as the elytra, tapering posteriorly, finely, rather sparsely punctate throughout. Male

unknown; female with the sixth ventral narrowed at tip; the latter rather strongly, evenly arcuate. Length 8.0 mm.; width 1.4 mm. Texas (Galveston) .... **atronitens** n. sp.

Form rather slender, feebly fusiform, rather convex, shining, black, the prothorax very faintly picescent; legs flavate, the antennae fuscous, flavate toward tip; head very narrow, parallel and elongate, very much narrower than the elytra, the sides straight and parallel for a long distance behind the eyes, then rapidly rounding to the neck; eyes well developed, moderately prominent; punctures rather coarse and close-set in basal half, the anterior half almost impunctate; prothorax distinctly elongate, as long as the head and slightly wider, the sides parallel and evenly, very distinctly arcuate, the punctures moderate in size, unusually feebly impressed and not at all conspicuous, sparse; elytra distinctly elongate, parallel, only very slightly longer but more distinctly wider than the prothorax, the punctures small but strong, close-set and confused throughout; abdomen as wide as the elytra, gradually tapering posteriorly, finely and not very closely punctate, polished. Male unknown; female with the sixth ventral as in *atronitens*. Length 6.5 mm., width 1.28 mm. Virginia (Norfolk).......................**parviceps** n. sp.

12 — Body stout, fusiform, moderately convex, polished, black, the elytra bright rufous with an elongate parallel sutural spot of black, extending from the base to about apical fourth and slightly dilated behind; legs pale flavate; antennae black, the two basal joints rufous; head narrow and elongate, very much narrower than the elytra, the sides feebly converging behind the eyes and almost evenly, distinctly arcuate from the eyes to the neck, the latter not quite three-fourths as wide as the head; eyes moderate in size and prominence; punctures rather small and moderately close-set, the anterior half subimpunctate; prothorax distinctly elongate, only very slightly narrower than the head, the sides parallel and feebly arcuate; punctures rather coarse, impressed, sparse; elytra large, longer than wide, the sides parallel and feebly arcuate, much longer and wider than the prothorax, the punctures small but strong, close-set and confused; abdomen distinctly narrower than the elytra, finely, not very closely punctate. Male with the fifth ventral not modified at apex, the sixth with an acutely triangular notch nearly three-fourths as wide as the apex and fully as deep as wide; female with the elytra still larger, the abdomen broader and the head not wider than the prothorax, the sixth ventral obtusely rounded at tip. Length 8.4 mm.; width 1.55–1.7 mm. Indiana and Illinois......**sellatum** Lec.

13 — Form rather stout and convex, shining, black, the elytra rufous with the sutural bead sometimes darker especially at base; legs rufous, the antennae dusky, rufous at base; head elongate, much narrower than the elytra, the eyes rather prominent; punctures moderately coarse, rather shallow and extremely sparse; prothorax much elongated, narrower than the head, parallel, the sides feebly arcuate, the apex slightly narrower than the base; punctures moderately coarse, shallow, impressed, very sparse, with a more regular series along the smooth median area; elytra slightly elongate, parallel, scarcely longer but distinctly wider than the prothorax, the sides feebly arcuate; punctures very coarse, impressed, sparse and only partially serial; abdomen as wide as the elytra

or very nearly so, parallel, finely, rather closely punctate but shining. Male with the fifth ventral unmodified, feebly sinuato-truncate at tip, the sixth with a triangular emargination, much wider than deep, occupying three-fourths of the apex with its angle well defined and not rounded, the notch gradually formed with broadly rounding sides posteriorly; female having the narrow sixth ventral arcuato-truncate at tip. Length 8.7 mm.: width 1.5 mm. Massachusetts and New Jersey. **cribratum** Lec.

Form similar but more slender, convex, polished throughout, black, the elytra bright and paler rufous, with a small black scutellar spot; legs pale flavate, the antennae dusky, flavous toward base and apex; head elongate, much narrower than the elytra, almost wholly impunctate toward the middle throughout the length, very sparsely punctured toward the sides; prothorax nearly as in *cribratum*, very remotely and rather feebly punctate, the sides more converging anteriorly, the apex distinctly narrower than the base; elytra but little longer than wide, as long as the prothorax but much wider, the punctures scarcely as coarse as in *cribratum* and very much sparser, rather distinctly serial throughout; abdomen slightly narrower than the elytra, finely, rather closely punctate, with the pubescence much more distinct than elsewhere as in *cribratum*. Male with the fifth ventral unmodified as in *cribratum*, the sixth with a narrower and deeper triangular incisure, about half as wide as the apex, less gradually formed and much deeper than wide, the angle at the bottom narrowly rounded. Length 7.7 mm.; width 1.3 mm. South Dakota (Volga)................................**rubripenne** n. sp.

There may be several closely allied forms in the Pacific coast region besides the very distinct *tumidum*, but it seems best to recognize only two species as known by material already collected, one — *pacificum* — with large elytra, much longer and wider than the prothorax, and the other — *californicum* — with small elytra, about as long as the prothorax and but little wider. To the first I have attached a subspecies based upon differences of facies and slight modifications of the male sexual characters. The other also appears to have some slightly modified derivatives or subspecies, but they are not defined at the present time, it being better to leave this difficult investigation for a future study with more ample material. The last two species of the table are aberrant and suggest *Lissobiops* in certain special characters, such as the more apically narrowed prothorax and coarse, sparse sculpture. *Properum* of Horn, which is the only described species not represented before me, appears to be more closely related to *Cryptobiella*, as shown by the original description;

it is a small species about 7 mm. in length and occurs in Arizona. I have never seen it.

Lissobiops n. gen.

The very fine and rather rare species named *Cryptobium serpentinum* by LeConte, is distinguished from any known form of *Hesperobium* by four characters of greater or less importance, which together appear to demand generic separation. The most important of these characters is probably the medially interrupted side-margins of the pronotum, the latter being bounded laterally by a continuous fine reflexed bead in *Hesperobium*. The second is the imperfect pleural fold of the elytra, which comes far from attaining the infrahumeral part of the inflexed sides; the third involves the narrow neck, which however is probably of less significance in this case than would seem apparent and the fourth concerns the general scheme of coloration, which is unique among our Cryptobia, and, bearing in mind the extreme constancy of the color scheme in some other parts of the Paederini, such as *Paederus* for example, this character, which so affects the general habitus of the species, is probably of considerable importance from a generic viewpoint. *Lissobiops* resembles *Hesperobium* in its bidentate mandibles, but the basal joint of the antennae is even longer than in any species of that genus. The single species known thus far may be described as follows:—

Body slender, convex and fusiform, highly polished throughout, pale testaceous in color, the anterior two-fifths of the head, the prothorax, a subquadrate spot at the scutellum and the entire first, fifth and sixth ventrals deep black; legs extremely slender, pale flavate; antennae flavo-testaceous, joints two to six black; head narrow, elongate, subrhomboidal, moderately narrowed before the eyes, which are moderate in size and prominence, the basal joint of the antennae rather longer than the next four combined and almost as long as the extreme width of the head; punctures small, very feeble and extremely sparse throughout; prothorax elongate, narrower than the head, rather strongly narrowed anteriorly from the middle, the sides arcuate, the apex much narrower than the base, the punctures feeble, very remote, with a more close-set series along the broad median impunctate area; elytra not quite as long as the prothorax but much wider, slightly elongate, wider than the head, parallel, the punctures coarse, deep, sparse and serially arranged; abdomen distinctly narrower than the elytra, feebly and very sparsely punctate. Male with the fifth ventral unmodified, the sixth with a triangular, gradually formed emargination, fully half as wide as the apex and fully as deep as wide, with the angle not very obviously rounded, the surface along the sides and before the notch sometimes very feebly impressed. Length 8.0 mm.; width 1.28 mm. North Carolina (Asheville)..........................**serpentina** Lec.

I was fortunate enough to find two males of this species in the mountains of western North Carolina some years ago. There is undeniably a rather closer relationship in many important features between *Hesperobium cribratum* and *rubripenne* and this species than there is between those species and the normal species of *Hesperobium*, but on account of the formation of the pleural fold of the elytra and side margin of the pronotum, as stated above, the two former are attached for the present to *Hesperobium*. It may, however, ultimately be deemed more proper to consider *Lissobiops* as a subgenus of *Hesperobium* and assign to it the three species, *serpentina*, *cribrata* and *rubripennis*.

Biocrypta n. gen.

This genus is more closely related to *Gastrolobium* than to *Hesperobium*, because of the tridentate mandibles and the fact that the second or third ventral bears sexual marks, not of the same character as in the former genus, however, but distinctly different as may be seen from the description given below. These facts lead to the query whether it would not be preferable to base the generic characters of the subtribe primarily upon dentition of the mandibles, rather than upon the presence or absence of a pleural fold of the elytra. The type of *Biocrypta* differs completely in facies from any known form of *Gastrolobium*, and its fusoid form suggests rather *Hesperobium* at first glance, but in the form of the head it differs radically from either; it may be described as follows: —

Fusiform, rather stout and only feebly convex, pale and uniform red-brown in color throughout the body, legs and antennae, the head and abdomen alutaceous and micro-reticulate, the elytra still duller and finely rugulose, the pronotum polished and devoid of minute sculpture; head small, scarcely longer than wide, very much narrower than the elytra, the punctures moderately large, coarser than elsewhere and well separated; basal joint of the antennae a little longer than the next three combined, the third much longer than the second or fourth, which are equal; prothorax but slightly elongate, much narrower than the head, the sides feebly arcuate, the apex much narrower than the base; punctures fine and sparse, feeble and inconspicuous; elytra slightly longer than wide, large, parallel, one-half wider and two-fifths longer than the prothorax, finely, rather feebly, very closely and confusedly punctate; abdomen nearly as wide as the elytra, rather tapering posteriorly, finely, feebly and rather closely punctulate. Male not at hand; female with the second ventral unmodified, the third with a small rounded and feebly elevated flattened tubercle before the middle, the apex simple; fifth and sixth segments each with two widely separated larger setigerous punctures on the disk behind the middle, the latter arcuato-truncate at tip. Length 8.3 mm.; width 1.45 mm. Texas..**prospiciens Lec.**

According to Horn, the male has the third ventral lobed, but as this lobe seems to vary noticeably in form among the very few known examples, there may be several closely allied species of *Biocrypta*. As might be anticipated from its affinity in many directions with *Hesperobium*, the sixth ventral in the male is angularly emarginate, differing in this way from any known species of *Gastrolobium*.

Ababactus Shp.

The comparatively minute delicate species assigned to this genus, inhabit the warmer parts of North America and form the closest approach in our fauna to the European *Cryptobium*. At the same time they differ very much from *Cryptobium* in general habitus, and the two genera are not very closely allied. The species described by LeConte under the name *Cryptobium lepidum* is in every way congeneric with the west coast *Ababactus pallidiceps* and appears to be a typical *Ababactus*, although I have not seen the type species, but its true affinities were overlooked by Dr. Horn in his revision of *Cryptobium*. The two species represented in my cabinet may be readily identified by the following characters: —

Form slender, fusiform, rather depressed, polished, blackish-piceous in color, the head testaceous, with an infumate cloud at the centre of the vertex; legs pale flavate, the antennae dusky rufous at base; head strongly, moderately closely punctate; basal joint of the antennae as long as the next three; prothorax slender and much elongated, much narrower than the head, the sides parallel, broadly and distinctly arcuate, the apex and base subequal in width; punctures finer than those of the head, rather sparse, confused, the more regular close-set series along the median smooth space somewhat impressed; elytra fully two-fifths longer than wide, parallel and straight at the sides, fully three-fourths wider and two-fifths longer than the prothorax, the humeral angles distinct, the punctures fine, close-set and altogether confused in arrangement; abdomen slender, much narrower than the elytra, finely, not very closely punctate. Male with a small, deep, circular fovea just before the centre of the second ventral and two entirely similar foveae at basal third of the third ventral, the latter separated by an eighth or ninth of the entire width; fifth segment broadly and very feebly sinuate toward the middle, the sixth with a narrow and very deep cleft, bordered along its sides by a narrow deep gutter, the two uniting at the bottom of the cleft, forming a deep excavation which attains the base of the segment, gradually narrowing to a very fine gutter near the base, the posterior angles of the cleft rounded, the emargination nearly four times as deep as its median width, the bottom obtusely rounded; female with the fovea of the second ventral wanting, the two foveae of the third completely as in the male, the fifth arcuato-truncate, the sixth narrow but broadly arcuato-truncate and simple at apex, the abdomen a little broader than in the male and the head somewhat narrower and more elongate. Length 4.6 mm.; width 0.7 mm. California (north of San Francisco) .... **pallidiceps** Csy.

Form nearly similar but rather stouter, polished, pale brownish-testaceous throughout, the legs but little paler, the antennae scarcely at all dusky; sides of the head behind the eyes feebly converging to the broadly rounded basal angles; punctures finer, sparse; antennae longer and more slender, nearly half as long as the body, the basal joint similar; prothorax slender, elongate, much narrower than the head, the sides parallel, nearly straight, rounding and more converging anteriorly, the neck scarcely more than a third as wide as the head, the punctures fine, feeble and rather sparse, the series as in *pallidiceps;* elytra as in that species but still more finely punctate, fully four-fifths wider than the prothorax and more than two-fifths longer; abdomen relatively a little wider though much narrower than the elytra, finely but distinctly, rather more sparsely punctate. Male with the second ventral wholly devoid of any trace of fovea, the third with two foveae exactly as in *pallidiceps*, the fifth arcuato-truncate at tip, with a small shallow and much more abruptly defined median sinus, the sixth with a narrow very deep cleft surrounded by a deep gutter as in *pallidiceps;* female not at hand. Length 4.2 mm.; width 0.75 mm. Texas................ **lepidus** Lec.

The species described by Horn under the name *Ababactus nactus*, I have not seen, but would infer from the description that it differs from *pallidiceps* in its sparser punctuation of the head, finer and denser punctures of the elytra, in its less elongate prothorax and much less elongate elytra, which are said to be scarcely longer than the prothorax; it occurs in Arizona. *Pallidiceps* is much more closely allied to *lepidus* than to *nactus*, but is a larger species with relatively narrower head and darker coloration, besides differing in the male sexual characters.

SPHAERONIA.

The chief characteristics of this subtribe are the extremely slender neck, formed nearly as in *Stilicus* and *Scopaeus* and the small obtuse fourth palpal joint. These features are entirely foreign to the Cryptobia and also to the related Lathrobia and are correlated with so many peculiarities of structure as to indicate the propriety of separating these minute, frail and extremely interesting forms as a distinct subtribal group, for which I would propose the above name. The group is probably peculiar to the American tropics, and, in addition to the two genera here defined, will probably include several others when those almost inexhaustible regions are more thoroughly explored. The two following genera are defined upon examples kindly given me several years ago by Dr. Sharp, by whom they were originally described: —

Body less slender, almost as in *Ababactus* but more convex, moderately shining, very minutely punctured; head elliptically rounded at base behind the eyes, which are moderate or rather small and slightly prominent, placed at the middle of the sides, the frontal part before them abruptly narrowed to a moderate degree, the antennal prominences large and pronounced; labrum short, truncate, edentate, with a semicircular median emargination; surface more coarsely and confluently sculptured in anterior half, finely and sparsely punctate posteriorly, the two post-ocular foveolae of the Cryptobia distinct, the surface between them feebly swollen; mentum transverse, biobliquely tumid; maxillary palpi normal in form, the third joint obconical, longer than the second, finely, closely pubescent; gular sutures narrowly separated, parallel, feebly diverging anteriorly; antennae rather stout, the joints closely joined, the first nearly as long as the next four combined, strongly sigmoid, stout and finely, closely pubescent, the second much longer than the third; prothorax long and narrow, much narrowed anteriorly to the neck; prosternum elongate before the coxae, broadly, transversely impressed anteriorly, feebly carinate posteriorly; pronotum very convex, extremely minutely punctate, without much more than a narrow trace of a smooth median line, the surface prominent at the middle near the base and bi-impressed as in Scopaei; elytra much wider than the prothorax, nearly as wide as the head, closely punctate, the sutural bead evident; abdomen rather narrower than the elytra, the segments only feebly impressed at base; legs long, very slender, the tarsi long, filiform, the first and fifth joints elongate; sexual characters of the male consisting of feeble transverse folds on the second and third ventrals and apical emargination of the sixth. Amazon................***Scopaeodes**

Body very slender and of remarkably specialized structure throughout, scopaeoid in form, moderately convex, shining, finely, inconspicuously punctured, the head more coarsely and sparsely so throughout but more coarsely anteriorly than posteriorly; coloration pale; head elongate-oval, not abruptly narrowed before the eyes which are before the middle, rather small, prominent and very coarsely faceted; posterior outline semicircular, the median part of the base forming an abruptly projecting collar inclosing the neck; sides without post-ocular foveolae but with a deep longitudinal groove extending along the lower margin of the eyes, and gradually becoming attenuated to the neck; upper margin of the eyes also bordered by a deep groove which does not extend behind the eye; front strongly tritumorose; labrum very short, biobliquely and rectilinearly truncate, with a feeble median sinus, edentate; mentum very small; labial palpi slender, normal; maxillary palpi strongly specialized, the second joint slender, the third strongly inflated and rounded in outline but abruptly constricted at base and obliquely joined to the second by a slender peduncle; gular sutures completely united, forming a fine median stria anteriorly becoming a broad coarsely impressed groove posteriorly; mandibles bidentate within, the left at least strongly grooved externally; antennae rather thick, submoniliform, the basal joint cylindrical, thick and not much longer than the next two combined, the second and third subequal; prothorax elongate-oval, gradually attenuate anteriorly; prosternum extremely long before the coxae, almost evenly and strongly convex; pronotum tumid in the middle near the base, the median impunctate line obvious; elytra wider but not longer than the prothorax, the sides diverging, obscurely punctulate, the surface impressed at each side of the suture toward base only; abdomen narrower than the elytra, the segments feebly impressed at base; legs moderately slender but not very long, the anterior tibiae strongly, obtusely dentate within, the intermediate slender and cylindric, the posterior gradually thicker from base to apex, the tarsi rather long, slender, the basal joint of the posterior about as long as the next two together but much shorter than the fifth; claws well developed. Amazon. [= *Sphaerinium* Shp. — nom. praeocc.]..***Sphaeronium**

The name *Sphaeronium* was substituted for the original *Sphaerinium* by Dr. Sharp, and the genus is founded upon a species described under the specific name *pallidum* by that author. The type of *Scopaeodes* — a name somewhat unfortunate in view of the lack of any real affinity with *Scopaeus*,— is *S. gracilis* Shp. The latter is 5 mm. in length, the former not much shorter but notably more slender.

DOLICAONES.

This subtribe combines in a remarkable manner the essential characters of the Paederi and Lathrobia, agreeing with the former in the general nature of the male sexual characters and in the peculiar compressed and pubescent fourth joint of the maxillary palpi, and with the latter in general habitus, structure of the prothorax and other features. The genera are few in number and belong wholly to the old world fauna in all probability. Those represented in my cabinet may be defined as follows: —

Eyes normal and well developed.................................... 2

Eyes wanting, replaced by a small whitish translucent point at the posterior margin of the antennal cavity.................................... 3

2 — Body very large, rather stout and parallel, moderately convex, coarsely, rather sparsely punctate, the pronotum with only a partially defined median smooth line, the abdomen with coarse sparse punctulation; hairs long and bristling; head large, oblong, the neck very broad, nearly three-fourths as wide as the head; labrum short and transverse, with a small triangular emargination, at each side of which there are two very short obtuse denticuliform lobes; antennae filiform, rather stout, barely as long as the head, the joints feebly obconical, the basal joint cylindric, but little longer than the next two combined; gular sutures feeble, rather narrowly separated, gradually converging and most approximate behind the middle, rapidly diverging and obsolescent at base; ligula bilobed at tip; paraglossae compressed, fimbriate at tip; maxillary palpi moderate in length, rather slender, coarsely, sparsely setulose; prothorax large, oblong; prosternum short before the coxae; elytra very short, less than half as long as the prothorax, with rounded basal angles, the hind wings probably wanting or vestigial; abdominal segments only very feebly impressed at base; legs rather long, somewhat slender; hind tarsi nearly three-fourths as long as the tibiae, densely clothed with stiff fulvous hairs beneath, the first joint much longer than the second and subequal to the fifth; claws moderate; anterior tarsi moderately dilated. South Africa. [= *Ophiomorphus* Dej. and *Adelobium* Nord.] ....***Dolicaon**

Body small in size, subparallel and slender, moderately convex, rather finely, sparsely and evenly punctate, the pronotum with a smooth median line; abdomen not densely punctulate; pubescence short and inconspicuous; head moderate, usually narrower than the prothorax, oblong, the neck very wide, four-fifths as wide as the head; labrum very short, transversely truncate, with a very small rounded median sinus, at each side of which there is a small and abruptly formed tooth; antennae short, rather slender; gular sutures evenly arcuate, moderately separated, most approximate at the middle; maxillary palpi with the third joint much longer than the second, strongly obconical and compressed; prothorax oblong, the angles distinct; prosternum more developed before the coxae than in the preceding genus; elytra well developed, as long as the prothorax or longer, the basal angles distinct; hind wings probably well developed; abdominal segments not impressed at base; legs slender, the hind tarsi filiform, the joints proportioned nearly as in the preceding; anterior tarsi, rather feebly dilated. Europe.....................***Leptobium**

3 — Body very small in size, slender, parallel, convex, polished, distinctly, evenly and more closely punctured, the abdomen relatively finely, very sparsely punctulate; pubescence entirely inconspicuous; head about as wide as the prothorax, somewhat pyriform; labrum as in *Leptobium*, bidentate, the teeth longer and more aciculate; gular sutures well separated, converging to about the middle, thence subparallel to the base; maxillary palpi with the third joint much longer than the second, subcylindric, rapidly narrowed at base, sparsely setulose; antennae short, one-half longer than the head, slender basally, rapidly incrassate distally; neck narrower, three-fifths as wide as the head; prothorax suboval, widest anteriorly, with a narrow median smooth line; prosternum well developed before the coxae; elytra extremely short as in *Dolicaon*, with rounded basal angles, the hind wings undoubtedly obsolete or vestigial; abdominal segments not impressed basally; legs slender, the hind tarsi nearly as in *Leptobium*, the anterior feebly dilated. Europe..................................***Scotonomus**

Dolicaon Lap., is founded upon the comparatively gigantic *lathrobioides* Lap., of the regions about Cape Town. Among some 450 species of Coleoptera which I took in that vicinity, there was only this one Paederid, — the largest species of the tribe known to me, — as though the entire paederoid energy of the country had been concentrated in this single species. The diagnosis of *Leptobium* (n. gen.) given above, is taken from the *biguttulum*, of Lacordaire, and that of *Scotonomus* Fauv., from the *raymondi*, of Fauvel. The species, although very few in number, display in *Dolicaon* and *Scotonomus* the greatest disparity in size observable within any of the subtribes of Paederini. In the formation of the very short elytra and probable absence of hind wings, these two genera are identical and wholly different from *Leptobium*, the European species requiring a new generic name, since both

Ophiomorphus and *Adelobium* refer solely to the large South African species forming the type of *Dolicaon.* Dr. Sharp describes from South America (Tr. Ent. Soc. Lond., 1876, p. 247) a small and very aberrant species, under the name *Dolicaon distans*, without however alluding to the structure of the terminal joint of the maxillary palpi, so that I cannot confirm the generic reference. The probabilities are that it is not one of the Dolicaones as here restricted.

PAEDERI.

In this unusually isolated subtribe the labrum loses a good deal of the value that it has elsewhere, and, although always rather short and broadly truncate, with a small median notch or sinus somewhat as in the Lathrobia, this emargination may be rather wide and shallow, evenly rounded and without flanking teeth as in the European *fuscipes* — judging from a specimen so named for me by Mr. Reitter, — or an abruptly formed semicircle, with a short broad obtuse tooth at each side, as in *femoralis*, or a true triangle with straight sides, with short lobe-like teeth adjoining, as in *riparius*, in all the cases mentioned being entirely devoid of a denticle at the bottom of the emargination. Or, the emargination may be deep, evenly rounded and with a small acute tooth at the bottom, with the apical margin adjoining only broadly and arcuately lobed, as in *littoreus*. Most of these cases refer to *Paederus* proper. In *Paederidus* Rey, probably throughout the genus, the median emargination has a more or less evident triangular tooth at the bottom, this being homologous with the median tooth in the Lithochares.

In general structure, especially in the form of the prosternum, labrum and strongly dilated anterior tarsi, the Paederi display more affinity with the Lathrobia than any other type of Paederini, and the more or less fortuitous tooth at the bottom of the labral emargination, together with the prosternal structure and the dilated anterior tarsi, prove also a relationship with the Lithochares. It is still more evidently related to Lathrobia through *Domene*, — a genus wholly out of place in the European catalogues, — and the Lithochares connect it with the Medones, although there is evidently a closer relationship between the last two named than between the Paederi and Lithochares, as shown by general habitus. Our species will form three closely allied genera. The four genera represented before me may be distinguished as follows: —

Head large, more or less quadrate and broadly truncate at base; prothorax very broad and strongly rounded at the sides anteriorly, strongly narrowed thence to the base; integuments coarsely and sparsely punctate and pubescent; fourth tarsal joint strongly bilobed; gular sutures distinct, moderately separated and impressed. General in distribution. [= *Paederomorphus* Gaut.]..**Paederus**

Head relatively small, strongly narrowed behind the eyes and narrowly truncate or rounded at base, the prothorax relatively much smaller and more evenly oval... 2

2 — Punctures and pubescence coarse and sparse, the abdomen always very sparsely punctulate, with the dorsal segments more or less feebly, transversely impressed at base; gular sutures gradually converging and most narrowly — though somewhat widely — separated behind the middle of the post-oral surface, always very feeble and unimpressed and sometimes subobliterated... 3

Punctures and pubescence finer and close-set, the abdominal segments strongly, transversely impressed at base; first abdominal segment without basal carina... 4

3 — Eyes moderate in size; abdomen obtuse; fourth tarsal joint rather wide and strongly bilobed; head and last two ventrals always black, the elytra invariably dark steel-blue in color. Entire United States..**Paederillus**

Eyes large; abdomen gradually narrowed toward tip; fourth tarsal joint very narrowly bilobed; color testaceous nearly throughout. Sonoran regions..**Leucopaederus**

4 — Eyes moderate in size; fourth tarsal joint not wider than the preceding, small and slightly bilobed; gular sutures becoming almost completely confluent posteriorly. Europe..............................*Paederidus**

The beetles of the present group are more highly and conspicuously colored than any others of the tribe, and, being at the same time of moderately large size, especially in the tropics, they have received considerable attention from systematic writers. Excepting the warmer parts of the new world, our representatives are less numerous and less diversified than those of Europe — an exceptional case in the Paederini.

Paederus Grav.

The secondary sexual characters of the male are but slightly diversified, either in this or the other genera of the group, and are very nearly similar throughout, the fifth ventral being virtually unmodified, the sixth having a narrow parallel-sided slit, two to four times as deep as wide. The slit sometimes has its edges beveled throughout as in *grandis*. The elytra of the male are nearly always perceptibly shorter than in the female and the head is sometimes much larger in that sex, but otherwise there is very little sexual difference in the facies. The anterior tarsi are strongly dilated in both sexes and clothed beneath with dense pads of short whitish spongiose pubescence. The various species are confined to the warmer parts of the United States, becoming very numerous in Mexico and are larger, as a rule, and heavier in build than those of *Paederillus*. The four in my cabinet may be known by the following characters: —

Legs black, the femora pale in about basal half. Body large and rather stout, shining, the head and last two ventrals black, the elytra dark blue, prothorax rufous and abdomen flavo-testaceous; antennae black, pale toward base and apex; head in the male large, quadrate, wider than the elytra, with the basal angles very broadly rounded, the eyes only slightly prominent and at about twice their length from the base, smaller in the female, notably narrower than the elytra, with the sides converging and broadly arcuate behind the eyes to the neck; prothorax slightly longer than wide, strongly convex, ovoidal, perceptibly narrower than the head in the male but equal to the latter in the female, polished, with a very few fine impressed and widely scattered nude punctures; elytra very coarsely and deeply but not densely punctate, quadrate, slightly wider than the prothorax and equal to it in length in the male, longer than wide, slightly longer than the prothorax and just visibly wider than the latter in the female; abdomen parallel, slightly narrower than the elytra. Length 9.2–10.5 mm.; width 1.8–1.9 mm. Arizona.................................**grandis** Aust.

Legs pale, the femora in rather less than outer half and the tibiae gradually, indefinitely and more nubilously toward base, black. Body otherwise nearly as in *grandis*, the head in the male large, quadrate, parallel at the sides, with the basal angles much less broadly rounded than in *grandis*; eyes nearly similar, the punctures moderately strong, few in number, widely scattered; prothorax only slightly longer than wide, strongly convex, not so greatly narrower than the head as in *grandis*, rounded at the sides anteriorly, scarcely punctured; elytra in the male much larger, longer than wide, and distinctly longer than the prothorax, equal in width to the latter and but very slightly narrower than the head, similarly punctured. Length 10.0 mm.; width 1.8 mm. Lower California...**femoralis** Lec.

Legs shorter and relatively stouter, pale honey-yellow throughout, the femora abruptly black in outer third. Body much smaller than in the preceding species, stout and strongly convex, similar in coloration and polished lustre; head in the male a little wider than the prothorax or elytra, the sides converging and circularly arcuate behind the eyes to the neck, similar in the female but subequal in width to the prothorax and narrower than the elytra; eyes at one-half more than their own length from the base; prothorax scarcely longer than wide, oval, rounded at the sides, the latter strongly converging posteriorly as usual; elytra quadrate and scarcely longer than the prothorax in the male, notably longer in the female. Length 6.8 mm.; width 1.25 mm. Europe and Texas...**riparius** Linn.

Legs nearly as in *riparius* but entirely clear honey-yellow throughout, without trace of darker ornamentation. Body similar to that of *riparius* but still smaller and slightly more slender; head with only very slight sexual differences, distinctly wider than the elytra in the male and only just visibly so in the female; eyes moderately convex and prominent, at about a third more than their own length from the base, the sides behind them strongly converging and circularly arcuate in both sexes; prothorax scarcely visibly longer than wide, obtrapezoidal, the sides broadly arcuate, a little more rounded anteriorly; elytra not quite as long as wide or as long as the prothorax in either sex, coarsely, sparsely punctate, the sides feebly diverging from the base and broadly, feebly arcuate; abdomen subequal in width to the elytra. Length 6.0 mm.; width 1.0 mm. Florida (Crescent City) and Georgia...**littoreus** Aust.

It is rather remarkable that the European *riparius* should occur within the United States, but two males collected in the Caucasus and forwarded to me by Mr. Reitter, agree in all respects — allowing for sex — with a single female in my cabinet taken at an unrecorded locality in Texas. If it was collected in the neighborhood of Galveston, there is a strong probability of its being simply an adventitious importation, and, that it has established itself in America, is by no means proved. The Mexican *mexicanus* Er., is listed by Henshaw, but I have seen no examples taken within our borders; it has the coloration and facies of *grandis* but is much smaller, with the antennae and legs rufous, the tip of the posterior femora alone black. Our species are all alate and with distinct elytral humeri.

Paederillus n. gen.

This genus is much more boreal in range than *Paederus* and almost entirely replaces the latter in the United States, where it is distributed throughout from the Atlantic to the Pacific. Its species are much smaller as a rule than those of *Paederus*, and of more slender form, with little or no sexual difference in the head; the elytra are, however, frequently distinctly shorter in the male. The species are rather numerous but closely allied among themselves, having a remarkable persistency and uniformity of facies throughout. The coloration of the body is constant, being as stated in the table of genera, and the lustre is always shining, so that these characters will not be mentioned in describing the various forms below. The labrum is short and transversely truncate throughout and completely edentate, with a small abrupt subparabolic median sinus, devoid of medial denticle. The species are usually gregarious and therefore plentiful in individuals when discovered; those represented by material in my cabinet may be described as follows: —

Elytra large, much wider and longer then the prothorax in both sexes... 2

Elytra shorter, never very much longer than the prothorax, even in the female, and occasionally much shorter except in *texanus*............. 3

2 — Body slender, the legs pale throughout, the antennae blackish, pale toward base and slightly paler at the immediate apex; head elongate-oval, the eyes rather small but convex and prominent and at one-half more than their own length from the base; sides behind them rapidly converging, evenly, feebly and circularly rounded throughout to the neck, the angles obtuse and scarcely rounded, the base narrowly truncate; prothorax like the head subimpunctate as usual, elongate-oval, widest only slightly before the middle, narrower than the head; elytra very long, parallel, a third wider and more than a fourth longer than the prothorax in the male and distinctly wider than the head, the punctures only moderately coarse and unusually sparse; abdomen narrower than the elytra, parallel. Male with the fifth ventral very feebly sinuato-truncate at apex, the slit of the sixth narrow, parallel and very deep, the sides straight, the bottom of the slit concealed from view in specimens at hand; female not observed. Length 5.6 mm.; width 0.9 mm. Florida...**floridanus** Aust.

Body slender and nearly similar to the preceding throughout, except that the head is less elongate, the eyes a little larger, the sides behind them only feebly convergent and straight to the basal angles, which are rather broadly rounded, the base very much more broadly truncate; prothorax elongate-oval, only slightly narrower than the head, widest at two-fifths from the apex; elytra in the female only slightly longer than wide, a fifth wider and longer than the prothorax, slightly wider than the head, parallel, the punctures very coarse and rather close-set; abdomen subequal in width to the elytra, the sixth segment narrowly and feebly impressed along the middle in the female; male unknown. Length 4.9 mm.; width 0.8 mm. North Carolina ....**carolinae** n. sp.

Body stout; coloration as in the preceding, except that the femora are pale, becoming black in outer third to half, the tibiae and tarsi piceous throughout; head in the male but slightly longer than wide, the eyes rather convex and prominent, moderate in size, the sides behind them strongly convergent, straight for nearly the length of the eyes, then broadly rounding into the truncate base, which is moderably narrow; in the female nearly similar, except that the sides behind the eyes are only feebly convergent and the base more broadly truncate, the basal angles equally rounded in both sexes; prothorax rather stout but elongate-oval, about as wide as the head; widest only slightly before the middle, the sides broadly arcuate; elytra very large, parallel, deeply, moderately coarsely and rather sparsely punctate, convex, very slightly longer than wide and almost similar in the sexes, very much wider than the head and much wider and longer than the prothorax in both sexes; abdomen parallel, slightly narrower than the elytra. Male with the apex of the fifth ventral transversely truncate at apex, the slit of the sixth narrow and very deep, its sides parallel and straight posteriorly, gradually and slightly converging in less than anterior half to the narrowly rounded bottom, the surface distinctly impressed in prolongation of the slit; sixth ventral of the female impressed along the middle as usual. Length 5.3–5.7 mm.; width 1.2 mm. Texas (El Paso), — Mr. G. W. Dunn.

saginatus n. sp.

3 — Legs black or piceous-black, the femora pale in more than basal half..4

Legs pale throughout, never more than shaded slightly with piceous in the region of the knees..5

4 — Larger species, the elytral punctures much less coarse, moderately slender, the head but little longer than wide, the eyes moderate in size, prominent in the male, less so in the female; sides behind them rather strongly convergent and feebly arcuate in the former, less convergent and more arcuate in the latter, sex; base truncate, the angles distinctly rounded in the female, more narrowly so in the male; antennae rather stout, piceous-black, pale toward base; prothorax but slightly elongate, as wide as the head in the female, relatively a little narrower in the male, broadly arcuate at the sides and widest at apical third; elytra quadrate, less convex than usual, the punctures only moderately coarse and rather close-set, distinctly wider than the prothorax, as long as the latter in the male and a little longer in the female; abdomen parallel, a little narrower than the elytra in both sexes. Male with the fifth ventral transversely truncate at apex, the notch of the sixth elongate-oval in form and only slightly more than twice as deep as wide, rather broadly rounded at the bottom, the adjoining surface of the segment not at all

impressed; sixth ventral in the female almost completely unmodified. Length 6.0–7.0 mm.; width 1.0–1.1 mm. California (Placer Co.). **compotens** Lec.

Smaller species and rather more slender, with the elytral punctures normally coarse and deep and rather widely spaced; head small, very much narrower than the elytra in both sexes, the eyes moderate in size and prominence, at about two-thirds more than their own length from the base, the sides moderately converging behind them to the broadly rounded basal angles, without distinct sexual difference, the base rather broadly truncate; antennae nearly as in *compotens;* prothorax rather narrow and elongate-oval, fully as wide as the head in the female and nearly so in the male, widest and broadly arcuate at the sides at apical third; elytra quadrate, without much sexual difference, about as long as the prothorax in both sexes but distinctly wider; abdomen parallel, a little narrower than the elytra. Male with the apex of the fifth ventral feebly sinuate toward the middle, the slit of the sixth narrow, fully three times as deep as wide, with the sides nearly straight and parallel, the bottom rather more narrowly but evenly rounded, the adjoining surface not impressed, the sixth ventral in the female feebly impressed along the middle. Length 5.5–6.7 mm.; width 0.8–0.95 mm. New Mexico, Utah and Wyoming........................**nevadensis** Aust.

5—Elytra much abbreviated, much shorter than wide, with the basal angles very broadly rounded and the sides thence diverging to the apex, the hind wings probably vestigial. Body slender, parallel, convex; head suborbicular, scarcely longer than wide and without perceptible sexual differences, the eyes of the usual size, convex and prominent, the sides behind them rather strongly converging, the basal angles very broadly arcuate and the base somewhat broadly truncate; antennae pale, piceous-black toward the middle; prothorax very slightly narrower than the head, elongate-oval, widest behind apical third; elytra without sexual differences, very much shorter than the prothorax and about equal in width to the latter, coarsely, deeply and moderately sparsely punctured; abdomen subparallel, fully as wide as the elytra. Male with the apex of the fifth ventral transversely truncate, the slit of the sixth narrow and about three times as deep as wide, with its sides parallel and nearly straight, ogivally rounding toward the bottom, the latter rather narrowly rounded and narrowly beveled, the adjoining surface apparantly not impressed; sixth ventral of the female narrowly and very feebly impressed on the median line. Length 4.4–4.9 mm.; width 0.75–0.8 mm. Iowa............................**palustris** Aust.

Elytra subquadrate and parallel or very nearly so, with the basal angles less broadly rounded, the hind wings developed........................ 6

6—Elytral punctures much less coarse and deep than usual and very sparse. Body slender, subparallel, colored throughout as in the preceding, the head subsimilar in the sexes, rather small, distinctly narrower than the elytra, elongate-suboval, the eyes convex but rather small, at nearly twice their own length from the base, the sides distinctly converging behind them and broadly, feebly arcuate to the obtuse basal angles very near the neck, the angles moderately broadly rounded; prothorax elongate-oval, distinctly narrower than the head in both sexes, widest at about two-fifths from the apex, the sides very broadly arcuate even anteriorly; elytra quadrate, much wider but barely as long as the prothorax in the male, much longer than wide, a fourth wider and very slightly longer than the prothorax in the female, the sides subparallel, very feebly arcuate, the punctures becoming subobsolete toward tip; abdomen parallel, a little narrower than the elytra in the male, equal in width to the latter in the female. Male with the apex of the fifth ventral feebly sinuato-truncate, the slit of the sixth narrow, parallel and deep, the sixth ventral of the female feebly impressed along the middle. Length 4.5-5.0 mm.; width 0.78–0.88 mm. New York (along the ocean beaches)......................................**obliteratus** Lec.

Elytral punctures coarse, deep and moderately close-set throughout 7

7 — Slit of the sixth ventral in the male rounded at the bottom, the adjoining surface of the segment not very distinctly impressed............. 8

Slit of the sixth segment acutely angulate at the bottom in its external edge, the internal edge narrowly rounded, the edge between the angle and arcuation beveled; knees generally dusky...........................11

8 — Elytra larger, distinctly wider and longer than the prothorax in both sexes. Body stouter, somewhat as in *saginatus*, the head relatively small, very much narrower than the elytra, not longer than wide, suborbicular, the eyes rather large but not very prominent, at a third more than their own length from the base, the sides behind them moderately converging and straight for a short distance, then very broadly rounded to the rather broadly arcuato-truncate base; prothorax slightly elongate, stout, fully as wide as the head, widest at about apical two-fifths, the sides very broadly rounded and only feebly converging toward base, the latter unusually broad; elytra quadrate, convex, parallel, a third wider and nearly a fourth longer than the prothorax; abdomen parallel, distinctly narrower than the elytra. Male with the apex of the fifth ventral scarcely at all modified, the slit of the sixth subparallel and straight at the sides, narrow and fully three times as deep as wide, the edges finely and strongly beaded throughout, the bottom narrowly, parabolically rounded, the adjoining surface of the segment scarcely at all impressed; female not known. Length 5.3 mm.; width 1.0 mm. Texas (exact locality not recorded)......................................**texanus** n. sp.

Elytra relatively smaller and especially narrower, subequal in length to the prothorax..9

9 — Elytra with the basal angles only slightly exposed at base; head obtrapezoidal behind the eyes in the male; body slender. Head distinctly elongate, the eyes small, at nearly twice their own length from the base, very convex and prominent, the sides behind them rather strongly convergent and straight for the length of the eyes, then moderately rounding to the neck, the base moderately wide; antennae rufo-testaceous, dusky for some distance near the middle; prothorax rather narrow, much elongated and narrower than the head, widest before the middle, the sides broadly arcuate; elytra narrow and slightly elongate, parallel, the sides broadly, feebly arcuate, only very slightly wider than the prothorax and a little shorter than the latter, equal in width to the head; punctures less coarse and distinct than in the two following species; abdomen parallel, as wide as the elytra. Male with the fifth ventral

unmodified, the slit of the sixth very narrow and deep, nearly four times as deep as wide, its sides straight and parallel, the bottom evenly and circularly rounded, the edges finely beaded; female unknown. Length 4.8 mm.; width 0.8 mm. Iowa..................**iowensis** n. sp.

Elytra with the basal angles widely exposed at base; body stouter, the head almost semicircularly rounded behind the eyes and slightly narrower than the elytra..10

10 — Body subparallel; head very slightly longer than wide, the eyes rather well developed but only moderately prominent, at about one-half more than their own length from the base, the portion behind them semicircularly rounded from eye to eye, with feeble truncation at the neck; prothorax slightly elongate and a little narrower than the head; widest at about a third from the apex, the sides broadly arcuate; base four-fifths of the maximum width; elytra quadrate, parallel, scarcely longer than wide, equal in length to the prothorax and a fifth wider; abdomen parallel, distinctly narrower than the elytra. Male with the slit of the sixth ventral only moderately narrow, scarcely three times as deep as wide, with its sides straight and parallel but arcuately converging in anterior two-fifths, the bottom evenly, parabolically rounded; edges finely beaded throughout; sixth ventral in the female strongly impressed along the middle. Length 4.2–5.6 mm.; width 0.78–1.0 mm. New York, Virginia, North Carolina and Iowa....................**littorarius** Grav.

Body, head and eyes throughout nearly as in *littorarius*, the sides of the head behind the eyes more unevenly arcuate, becoming straighter near the eyes; prothorax narrower, smaller and relatively more elongate, much narrower than the head, the sides strongly, evenly arcuate, the base narrower, three-fourths of the maximum width, the latter at fully two-fifths from the apex; elytra slightly longer than wide, parallel, a fourth wider than the prothorax and evidently a little longer; abdomen as wide as the elytra. Male with the slit of the sixth ventral about three times as deep as wide, having the form of a very narrow deep parabola, its sides becoming almost parallel behind, the edges finely beaded and the surface of the segment adjoining anteriorly slightly flattened; female unknown. Length 5.2 mm.; width 0.9 mm. Washington State.
pugetensis n. sp.

11 — Form slender, nearly parallel, the head rather narrow and elongate, the eyes moderate in size, at about two-thirds more than their own length from the base and only moderately prominent, the sides behind them distinctly convergent to the neck, at first nearly straight, then rather broadly rounded through the basal angles, the base moderately broadly truncate, the head similar throughout in the sexes; prothorax distinctly elongate-oval, a little narrower than the head, widest before the middle, with the sides broadly arcuate; elytra slightly wider than the head, the sides subparallel, the apex rather distinctly and angularly emarginate, not quite as long as wide and scarcely as long as the prothorax in the male, quadrate and equal in length to the latter in the female; abdomen as wide as the elytra. Male with the slit of the sixth ventral fully three times as deep as wide, parallel, its sides nearly straight but gradually and parabolically converging anteriorly, the edges finely and strongly beaded, the bead bounded externally by a fine

strong canaliculation throughout; female with the sixth ventral strongly and narrowly impressed along the middle posteriorly. Length 4.5–5.9 mm.; width 0.75–0.8 mm. Rhode Island (Boston Neck) and New York (Long Island)................................**canonicus** n. sp.

The descriptions have been taken from the male unless the contrary is expressed or evident. *Texanus*, which is probably from the eastern or central parts of the state, resembles the El Paso *saginatus* considerably, but, besides the coloration of the legs, it differs in having the eyes larger and much less prominent and the part of the head behind them shorter, with less converging sides and much more broadly rounded basal angles, with certain other differences, the comparisons being made from the male. *Canonicus* may be distinguished from *littorarius* by its slightly more slender form and distinctly smaller and shorter elytra.

Leucopaederus n. gen.

This genus differs from *Paederus* and *Paederillus* in a number of characters, no one of which would perhaps be sufficient to qualify it, but which, in their summation, seem to be amply sufficient to demonstrate its generic isolation. When color alone, for example, is so constant a feature as we know it to be in *Paederillus*, this alone becomes an important and very significant distinction, but when this is supplemented by the much larger eyes, relatively small head and prothorax, with the abdomen more gradually acuminate at apex and the much larger elytra, together with the rather different form of the prothorax, there can be but little doubt of the propriety or necessity of the course here suggested. The labrum in *Leucopaederus* is truncate and wholly edentate at apex, with a small and abruptly formed, parabolically rounded and completely edentate emargination at the middle, the surface adjoining the sinus being feebly swollen. We have at present but a single species as follows: —

Form stout, moderately convex, polished, pale rufo-testaceous throughout the body and legs, the elytra more brownish in tinge and the extreme apex of the abdomen black; antennae piceous, gradually paler toward base; head small, but little longer than wide, the eyes large, prominent, at their own length from the base, the sides behind them strongly convergent and evenly, circularly rounded to the neck, the base rather narrowly truncate; prothorax slightly narrower than the head, somewhat elongate, the sides rounded anteriorly, becoming thence parallel and straight in the male, or feebly convergent and slightly arcuate in the female, to the rounded basal angles; elytra large, quadrate in the male or very slightly longer than wide in the female, a half to three-fourths wider and two-fifths longer than the prothorax, parallel, with the sides nearly straight, the basal angles very broadly exposed at base and only narrowly rounded, the punctures only moderately coarse and unusually sparse; abdomen much narrower than the elytra in the male but nearly as wide as the latter in the female. Male with the fifth ventral unmodified, the slit of the sixth not more than twice as deep as wide, with its sides parallel and nearly straight posteriorly, becoming oval anteriorly, the edges finely beaded and the surface throughout beyond the bead narrowly and feebly impressed; sixth ventral of the female broadly and very feebly impressed along the middle. Length 4.0–5.1 mm.; width 0.9–1.0 mm. California (Yuma) and Arizona (East Bridge). **ustus** Lec.

I found this species in enormous numbers in hoof prints partially filled with decomposing vegetable matter, in the sands of the river bank on the Indian reservation opposite Yuma, Arizona. A few species of *Leucopaederus* occur also in Mexico, one of which has been described by Dr. Sharp.

LATHROBIA.

The distinguishing characters of this, the largest subtribe of the Paederini, are the abbreviated prosternal intercoxal piece, and the strongly dilated anterior tarsi, which it possesses in common with the Dolicaones and Paederi, and the conical and generally pointed or aciculate fourth joint of the maxillary palpi, by which it differs from both of those subtribes. Otherwise there is great variety in structure and facies, from the impunctate and polished *Dacnochilus*, to the densely and confluently sculptured *Domene*, and, in size, from the larger forms of *Glyptomerus* and *Eulathrobium* to the diminutive *Lathrolepta*. The eyes are present and generally moderately developed, except in *Glyptomerus*, where the normally faceted eye is replaced by a small whitish area in which the chitinous integument is evidently very thin, undoubtedly conveying a general impression of light to the cephalic ganglia and homologous with the smaller whitish sensitive spot in *Scotonomus*, of the Dolicaones. The widely dilated anterior tarsi are densely clothed beneath with large whitish pads, composed of peculiar flattened and multinucleated submembranous hairs. The gular sutures are invariably separated but vary in form and direction, affording good generic characters. The nineteen genera described below from material in my cabinet are divisible into at least four distinct groups represented by *Lathrobium*, *Lathrotaxis*, *Domene* and *Dacnochilus*, and are about equally diffused through the old and new continents:—

Labrum broadly rounded, edentate, having a broad and gradually formed angulate emargination, the angle at the bottom usually with a minute denticle as in some Paederi; integuments densely sculptured and subopaque anteriorly. Body rather slender, parallel and unusually convex, moderately large in size, the head well developed, oval, subcircularly rounded at base, the eyes moderately small, anterior; labrum short and transverse; maxillary palpi moderately long and thick, the third joint obconic, the fourth narrow, conical and acute; gular sutures arcuately converging for a short distance, then becoming straight, parallel and approximate to the base; antennae moderately long, thick, the joints rounded in outline toward base; neck about a third as wide as the head; prosternum moderately long before the coxae, carinate posteriorly; prothorax elongate-oval, the angles obliterated, the head and pronotum densely, confluently sculptured; elytra short, small, as wide as the prothorax and shorter, apparently subconnate, the sides broadly rounding to the base, the basal angles obliterated and the hind wings probably vestigial, the sculpture coarsely, confusedly punctured and shining; abdomen minutely, densely punctulate; legs rather long and slender, the hind tarsi slender, filiform, nearly as in *Linolathra*, the two basal joints each notably elongate, equal and slightly shorter than the fifth. Europe..***Domene**

Labrum bilobed and edentate; integuments more or less strongly and sparsely punctate.. 2

Labrum broadly rounded, dentate or edentate, having an abruptly formed deep angulate emargination at the middle; integuments subglabrous, subimpunctate and highly polished..............................23

2 — Elytra without a lateral fold.. 3

Elytra with a longitudinal fold on the deflexed flanks parallel with the side margin..16

3 — The normal faceted eye wholly obsolete; species large, parallel; head large, broadly arcuato-truncate at base, the labrum broadly lobed, the lobes narrowly rounded laterally, the broad median angulation not attaining the base; maxillary palpi long and slender, the fourth joint evenly, conically pointed; gular sutures broadly, feebly arcuate, widely separated anteriorly but gradually convergent to the base, at and before which they became virtually confluent; eye-spots obliquely fusi-

form; antennae long and slender, the narrowed bases or pedicels of the joints strongly compressed; neck two-fifths as wide as the head; prosternum feebly carinate almost to the apex; legs thick, the hind tarsi long and very slender, with the basal joint extremely short, the last joint much the longest; claws long and slender; integuments shining, sparsely and not very coarsely punctate, the punctures of the elytra confused and not seriate; anterior angles of the prothorax rounded and obliterated, the elytra generally shorter than the prothorax. Europe .... ***Glyptomerus**

The eyes normal and distinctly faceted 4

4 — Body normally convex, the fourth joint of the maxillary palpi small and acute; antennae moderate in length, with the joints not or only very feebly compressed at base 5

Body strongly depressed; maxillary palpi slender, the fourth joint much larger than usual, conical, with the apex truncate; eyes small; antennae long and rather stout, the joints compressed at base 15

5 — Neck broad, seldom evidently less than half as wide as the head and generally more than half 6

Neck narrow, about a third as wide as the head 13

6 — Hind tarsi longer and more slender, the basal joint much shorter than the second, the fifth very much shorter than the first four combined.. 7

Hind tarsi shorter and stouter, the first and second joints subequal, the first four differing but little among themselves and together frequently but little longer than the fifth 10

7 — Elytra very short, from one-half to two-thirds as long as the prothorax, with the basal angles obsolete; hind wings wanting or vestigial; abdomen more strongly, never densely punctate. Body moderately large in size, parallel and rather stout, the labrum short, broadly and angularly emarginate throughout its width at apex; maxillary palpi rather long, not inflated, the fourth joint narrowly aciculate; eyes moderately small; gular sutures rather widely separated, parallel; antennae moderate in length, very stout but with the joints obconical, the basal joint robust; prosternum moderately developed before the coxae; prothorax well developed, with the apical angles more or less distinct, the head broadly truncate at base, the angles rounded; neck wide, distinctly more than half as wide as the head. America .... **Apteralium**

Elytra varying in length from decidedly longer to distinctly shorter than the prothorax, always having the basal angles distinct and probably never connate, the hind wings present; abdomen always very minutely punctate 8

8 — Eyes very small, the head large, much wider than the elytra, truncate at the neck which is less than half as wide, the angles very broadly rounded; labrum very nearly as in the preceding genus, the maxillary palpi moderately long, with the third joint rather inflated distally and pedunculate basally, the fourth slender and aciculate; gular sutures strongly impressed, straight, moderately widely separated anteriorly, gradually converging to the base where they are most approximate and rather narrowly separated; antennae well developed and moderately thick, the joints obconical; prosternum rather long before the coxae; legs somewhat slender; posterior tarsi filiform, with the basal joint relatively larger than in *Lathrobium*. Eastern America.... **Abletobium**

Eyes normally developed; neck never less and frequently more than half as wide as the head; prosternum short and broad before the coxae; labrum short, rectilinearly truncate at apex, with a rounded median sinus, the lobes broad and feebly oblique at their apical margin; antennae variable, stout to rather slender; head broadly arcuato-truncate at base.. 9

9 — Body parallel, more or less stout, the gular sutures nearly straight, feebly converging from apex to base, near which they are most approximate, sometimes widely separated and parallel; head well developed but never wider than the elytra; prothorax oblong, with the anterior angles more or less distinct; elytra generally shorter in the male than in the female; body large to moderate in size, the sculpture rather coarse and sparse, except that of the abdomen which is minutely punctate. Cosmopolitan.................................**Lathrobium**

Body slender and fusiform, moderate in size, sculptured nearly as in *Lathrobium*; gular sutures parallel, arcuate, generally widely separated and most approximate at or slightly before the middle of the post-oral surface; head small; prothorax oblong, with the apical angles moderately distinct; elytra larger than in *Lathrobium*. America..**Litolathra**

10 — Gular sutures rather widely separated, parallel and straight to the base. Body slender, normally convex, the head well developed but not as wide as the elytra, broadly arcuato-truncate at base, with broadly rounded angles, the neck a little less than half as wide, the eyes rather small but unusually convex and prominent; labrum obliquely bilobed, the lobes rather narrowly rounded at tip; maxillary palpi rather short but nearly as in *Lathrobium*, the third joint obconic; antennae moderately thin, the joints elongate, subcylindric, rather rapidly narrowed at base; prosternum rather long in front of the coxae; prothorax oblong-elongate, with the angles distinct, the elytra oblong, parallel, with prominent basal angles and feebly subserial punctures, longer and wider than the prothorax; abdomen parallel, the sides straight, the sculpture very fine and dense; legs short, moderately stout; body small in size. Europe. ***Throbalium**

Gular sutures parallel and arcuate, rather widely separated, most approximate at or near the middle of the post-oral surface; labrum broadly, obliquely bilobed, the apex broadly and subangularly emarginate throughout the width 11

Gular sutures very widely separated, most approximate anteriorly, thence gradually diverging to the base where they are most remote; labrum narrowly, deeply and angularly cleft in the middle, the lobes each subquadrate in form with its apex obliquely truncate.................... 12

11 — Body parallel, moderately slender and decidedly depressed, small in size, the head subquadrate, rectilinearly truncate at base throughout the width, the angles right and not evidently rounded; eyes moderately developed, slightly prominent; maxillary palpi short, the third joint inflated toward tip; antennae rather long, moderately stout, the joints obconic; neck wide, three-fifths as wide as the head; prosternum short before the coxae; prothorax short and broad, with the apical angles well defined, the polished median line being defined by series of punctures; elytra oblong, longer and wider than the prothorax, with well-

defined basal angles, punctured in regular series; legs moderately short, decidedly slender; abdomen minutely sculptured. America. **Lathrobiopsis**

Body parallel, normally convex, slender, shining, rather small in size, sculptured as in *Lathrobium;* head well developed, parallel or gradually wider toward base, the latter broadly arcuato-truncate, the angles rounded; eyes rather small to moderate in size; maxillary palpi moderately long and not very stout or decidedly inflated; antennae generally very stout and submoniliform, the basal joint thick; neck generally a little more than half as wide as the head; prosternum somewhat longer before the coxae than in *Lathrobium;* prothorax suboblong-elongate, with the apical angles moderately distinct; elytra longer or shorter than the prothorax, the punctures frequently arranged in uneven series; abdomen parallel, with the sides straight; legs thick and rather short. America.. **Lathrobioma**

12—Body slender, parallel, moderately convex, very small in size, coarsely and sparsely sculptured, the head broadly truncate at base, with narrowly rounded angles, the eyes small and anterior; maxillary palpi short, the third joint inflated; antennae moderately long but stout and submoniliform; neck half as wide as the head; prosternum rather long in front of the coxae, the prothorax oblong-elongate, with the sides rounded at apex; elytra shorter than the prothorax, with the punctures rather confused in arrangement; legs moderate in length and thickness; abdomen parallel. America.. **Lathrolepta**

13—Posterior tarsi larger and more elongate, with the first joint distinctly shorter than the second. Body larger, broader and more fusiform, with the head relatively small, rounded at base, the eyes more or less well developed, the antennae long, slender, filiform, not incrassate distally, the labrum short, truncate, with a small and broadly angular median emargination, the lobes usually broadly, feebly oblique posteriorly and inwardly; gular sutures widely separated, distinct; prosternum moderately developed before the coxae; neck one-third as wide as the head; abdomen minutely, densely punctate and dull; elytral punctures irregular, never serial.. 14

Posterior tarsi smaller, more slender and filiform, the first joint distinctly longer than the second, the fifth about as long as the first two combined. Body smaller, extremely slender, linear and subparallel, the head relatively larger, oblong-elongate, arcuately truncate at base, with the angles rounded, the eyes rather well developed; labrum short, truncate, much narrowed at base, with the usual small median emargination, the lobes narrowly rounded externally; maxillary palpi shorter, somewhat strongly inflated, the fourth joint strongly retractile; gular sutures moderately separated, feebly arcuate, slightly diverging toward base, effaced throughout and traceable only by the arrangement of the punctures; antennae moderately thick, distinctly incrassate distally; prosternum much elongated before the coxae; prothorax much elongated, with the angles rounded; elytral punctures disposed in coarse impressed regular lines; anterior tarsi less strongly dilated; neck rather more than a third as wide as the head; legs rather short and slender. Europe.. ***Pseudobium**

14 — Gular sutures nearly straight, feebly converging posteriorly throughout and most approximate at or near the base of the head; maxillary palpi unusually elongate and slender, the fourth joint very slender and aciculate. Europe and America........................ **Tetartopeus**

Gular sutures arcuate, most approximate at or before the middle of the head, gradually diverging thence to the base; maxillary palpi rather less elongate and stouter; head nearly similar; species small in size. America .... **Deratopeus**

15 — Parallel, the neck wide, rather more than half as wide as the head, the latter transversely truncate at base, the labrum deeply and broadly cleft to the base, the lobes long, moderately diverging, parallel, slightly everted and evenly rounded at tip; fourth palpal joint evenly conical, not compressed; gular sutures widely separated, parallel, becoming feebly convergent toward base, where they are most approximate; antennae half as long as the body; prothorax short and broad, with the apical angles distinct, the prosterum short before the coxae as in *Lathrobium;* elytra a little wider and longer than the prothorax, with the punctures subserial in arrangement; legs rather short and stout, the hind tarsi moderately long and slender, with the first, third and fourth joints subequal, the second a little longer, the fifth as long as the preceding four combined; claws unusually long and strong. Europe...***Achenium**

Parallel and rather broad, nearly as in *Achenium,* the head, prothorax and elytra proportioned almost similarly; labrum very short, the emargination extending throughout the width, the sides not lobiform; gular sutures parallel and broadly arcuate, not very widely separated and most approximate at the middle; fourth palpal joint compressed; neck fully three-fifths as wide as the head; elytral punctures confused, not at all serial in arrangement; legs rather long, moderately stout, the hind tarsi long, slender, with the basal joint much elongated, subequal in length to the next two combined and longer than the fifth. Europe ....***Scimbalium**

16 — Gular sutures less separated, converging posteriorly, becoming most approximate at or near the base of the head; basal joint of the hind tarsi distinctly shorter than at the second.............................17

Gular sutures parallel, broadly arcuate to nearly straight, most approximate at or near the middle of the post-oral surface or at least distinctly before the base...18

Gular sutures generally more widely separated, most approximate anteriorly, gradually more or less divergent posteriorly, becoming most distant at the base..19

17 — Body large, stout, parallel, the head arcuato-truncate at base, with very broadly rounded obsolete angles, the neck but little more than a third as wide; lobes of the labrum obliquely subquadrate; prothorax oblong-suboval, the anterior angles rounded; abdominal segments feebly impressed at base; legs and tarsi thick. Eastern America.
Eulathrobium

Body rather large, more slender and convex, parallel, the head circularly rounded or feebly subtruncate behind, the neck about two-fifths as wide; lobes of the labrum evenly rounded throughout their contour;

prothorax elongate-oval, the angles obliterated; abdominal segments strongly, transversely impressed at base; legs and tarsi rather slender. Pacific coast of America................................ **Lathrotropis**

18 — Body somewhat small in size, more or less slender and less convex, parallel, the head oval or subquadrate, with the basal angles more or less rounded; eyes rather small in size, anterior; labrum short, the lobes widely divergent, more narrowly rounded laterally; maxillary palpi slender and elongate, not inflated; antennae more or less slender and elongate, the joints obconical; neck always noticeably less than half as wide as the head; prosternum rather long before the coxae, frequently feebly carinate throughout the length; prothorax more or less narrow and elongate-oval, with the anterior angles broadly rounded or obliterated, the punctures generally dense and confused, with the median impunctate line frequently subelevated; elytra frequently longer and wider than the prothorax, the punctures generally feebly sublineate; legs rather long and slender; tarsi as in the preceding genera. Europe and America.......................... **Lobrathium**

Body larger in size and less punctate; posterior tarsi rather shorter but more or less slender, the first joint subequal to the second and each longer than either the third or fourth, the fifth subequal in length to the first two together; body moderately large in size, rather broad, moderately convex, the head generally distinctly narrower than the elytra, broadly arcuato-truncate at base, the angles rather distinct and more or less narrowly rounded; eyes well developed; labrum with a large triangular notch, the lobes obliquely subquadrate, each subrectilinear at apex; maxillary palpi more or less elongate, not inflated, the fourth joint conical and acutely pointed; neck broad, more than half as wide as the head; antennae rather long and slender as a rule, filiform; prosternum short before the coxae; prothorax more or less oblong or obtrapezoidal, moderately elongate, with the anterior angles distinct; elytra larger than the prothorax, with the punctures generally sparse and always lineate in arrangement; legs rather long and slender. America...**Lathrotaxis**

19 — First and second joints of the hind tarsi equal or with the first a little longer than the second 20

First joint of the hind tarsi much shorter than the second............. 22

20 — Hind tarsi shorter, the four basal joints short and subequal, the fifth moderate; anterior tarsi feely dilated. Body very small, slender, rather depressed, the head small, broadly arcuato-truncate at base, the labral lobes thick, subquadrate, with rounded angles; eyes rather small; maxillary palpi short and stout, the third joint somewhat inflated; gular sutures very widely separated and strongly divergent, being separated at base by about a third the width of the head; antennae rather long and thick, the joints obconic; neck half as wide at the head; prosternum short; prothorax short, oblong, the angles acutely defined, the median impunctate area defined by impressed lines; elytra well developed as a rule, longer and wider than the prothorax; abdomen generally opaque and very densely punctulate. Eastern America.
Pseudolathra

Hind tarsi long, the two basal joints more elongate...................... 21

21 — Hind tarsi stout toward base, the fifth joint much elongated, the an-

terior strongly dilated. Body moderately small, rather stout, notably convex, the head moderately small, arcuato-truncate at base, the eyes well developed, the labral lobes somewhat large, subcircularly rounded; maxillary palpi rather long and thick but not inflated; gular sutures rather widely separated but almost parallel, very feebly diverging from near the apex to the base; antennae very long, slender and filiform; neck half as wide as the head; prosternum moderately short, the prothorax broad and short, oblong, the angles moderately defined; elytra moderate, slightly larger than the prothorax, the punctures lineate; abdomen broad, densely dull; legs rather slender, Western America. **Paralathra**

Hind tarsi very slender, filiform, the two basal joints relatively much elongated, the first frequently a little longer than the second. Body small, slender, subparallel and convex, the head rather well developed though always narrower than the elytra, the eyes moderately large, the labrum short, very broadly emarginate throughout the width, the lobes broadly, obliquely truncate, narrowly rounded externally; gular sutures moderately distant, very feebly diverging posteriorly and generally obliterated, being traceable only by the punctuation; maxillary palpi rather long and stout; antennae moderate in length and generally rather thick, the joints obconic; neck distinctly less than half as wide as the head; prothorax rather small, oblong, with the angles distinct; elytra variable but always much wider than the prothorax and never shorter, the sculpture always very sparse and lineate; abdomen slender, the punctures not very dense. America, except the Pacific coast fauna. **Linolathra**

22 — Body more or less fusiform, moderately small in size and of the usual convexity; head small, arcuato-truncate at base, the eyes generally well developed, the labral lobes wide, subcircularly rounded anteriorly; gular sutures widely separated, more or less rapidly diverging from near the apex to the base; palpi more or less short and thick; neck half as wide as the head; antennae moderately long, rather thick, the joints obconic; prothorax moderately large, oblong, the angles generally rather distinct; elytra always well developed, longer and wider than the prothorax, the punctuation linear; abdomen rather broad, minutely, very densely punctate and densely dull as a rule; legs moderately long and slender. America..........................**Lathrobiella**

Body parallel and rather convex, nearly as in *Lathrobioma*, small in size, the head well developed, as wide as the elytra, broadly arcuato-truncate at base, the eyes small in size; labrum short, broadly emarginate throughout the width, the lobes rather narrowly rounded externally; palpi moderately long and thick; gular sutures widely separated, arcuate, distinctly diverging from near the apex to the base, where they are separated by a fourth or fifth of the total width; antennae moderate in length, very thick, with the joints but little longer than wide; neck half as wide as the head; prothorax rather elongate, suboblong, with the angles distinct; elytra small, shorter than the prothorax, the basal angles as usual and not rounded; abdomen not densely punctulate, the segments not at all impressed at base; legs moderate in length, somewhat slender. Eastern America... **Microlathra**

23 — Form slender, parallel, moderately convex, the tactile setae at the sides of the body small and feebly developed; head moderate, not quite as wide as the elytra, broadly arcuato-truncate at base, with the angles not rounded; front normal; eyes well developed; maxillary palpi moderately long, the third joint slightly inflated, the fourth acute and slender toward apex; gular sutures widely separated; most approximate anteriorly, before the middle strongly arcuate, diverging widely to the base; antennae rather slender but very gradually and distinctly incrassate, the joints obconic; labrum edentate; neck barely two-fifths as wide as the head; prosternum short before the coxae; prothorax short, obtrapezoidal, with the angles distinct; elytra but little longer or wider than the prothorax, with a few fine punctures arranged serially; abdomen parallel, finely, sparsely sculptured; legs rather long, slender; posterior tarsi slender, filiform, the first joint elongate, the first four decreasing in length, the fifth about as long as the first. Subtropical America.. **Dacnochilus**

Form very stout and short, broadly convex, the lateral tactile setae long and conspicuous; head very short, much wider than long, trapezoidal; eyes moderate or rather small; frontal margin somewhat advancing far above the base of the labrum, broadly rounded; labrum bidentate; maxillary palpi rather small and slender, the third joint but very feebly inflated; gular sutures as in *Dacnochilus*, widely separated, strongly arcuate, most approximate a little before the middle, thence more widely diverging to the base than to the apex; antennae rather short, slender and subfiliform; neck relatively slender, not more than a third as wide as the head; prothorax short and transverse, the angles distinct; elytra short and transverse but longer than the prothorax, impunctate; abdomen short and broad, very densely punctulate and dull, gradually narrowed posteriorly; legs relatively short and slender, the tarsi nearly as in *Dacnochilus* but shorter. Tropical and subtropical North and South America. .... **Acalophaena**

Of the genera described in the above table not occurring within the geographical limits of this study, attention might be directed to the superficial similarity between *Glyptomerus* Müll (= *Typhlobium* Kr.), *Domene* Fauv., and the American *Apteralium*, they all having short, in some cases possibly subconnate, elytra and vestigial or wholly aborted wings, judging from their external facies. *Throbalium* Rey, has the usual habitus, but the very small *Pseudobium* Rey, is of peculiar appearance, being unusually slender, with the coarse punctures of the elytra arranged in regular lines which are rather strongly impressed, more so than in any American genus; there is also a notable extension of the prosternum before the coxae. The two genera *Achenium* Curtis, and *Scimbalium* Er., are evidently related by their general characters, although differing so radically in the structure of the labrum and hind tarsi. Their very depressed form seems to be correlated in some way with the very long antennae, and the entire facies bespeaks a habitat under the bark of trees. It is interesting to note, in this connection, the very long antennae pertaining to many other very depressed subcortical beetles — notably *Laemophloeus*, a condition brought about undoubtedly from necessities of this special environment. It is rather singular that the true affinities of *Domene* should have been overlooked by the European observers, excepting Rey, the peculiar dense sculpture having probably suggested a relationship with the Stilici, for it is evidently very close to *Lathrobium*. The genus *Dacnochilus*, although differing rather radically in the labrum and form of the prothorax, is really closely allied to *Linolathra*, as shown by the hind tarsi, gular sutures, sculpture and general facies. *Acalophaena* is a still more specialized form, of remarkably broad and compact build, with long bristling tactile setae at the sides of the body.

Apteralium n. gen.

As before remarked, this genus reminds us considerably of *Glyptomerus* and *Domene* in its very short elytra with obsolete humeral angles. The hind wings are wanting and represented by very minute vestigial fillets that are wholly inconspicuous; the elytra are however not connate. *Apteralium* differs from *Glyptomerus*, not only in the rather distinct and not obsolete anterior angles of the prothorax, but in the presence of well developed normal eyes and in the much shorter antennae, also in the relatively much less minute basal joint of the hind tarsi and more widely separated parallel gular sutures. We have two very distinctly characterized species as follows: —

Body moderately stout, dark piceo-rufous to piceous-black in color throughout, the legs and antennae rufous; head well developed, slightly wider than the elytra but only just visibly wider than the prothorax in the male, equal to the latter in the female, parallel and nearly straight at the sides, the basal angles moderately rounded; gular sutures straight; punctures coarse and very sparse, rather closer toward the sides; eyes at fully three times their own length from the base; prothorax about a fifth longer than wide, a little shorter in the female, the sides distinctly converging from the slightly obtuse apical angles to the base and nearly straight, the punctures coarse, very sparse and irregularly disposed, the broad median smooth area not defined by series; elytra slightly narrower than the prothorax and half as long in the male, equal to the latter in width and three-fifths as long in the female; the sides slightly diverging posteriorly from the humeri, which are not very broadly rounded; punctures smaller than those of the prothorax and less sparse, disposed in very uneven series, sometimes irregular; abdomen parallel, equal in width to the elytra in both sexes, shining, the punctures fine and not dense. Male with ventrals two to four narrowly and very feebly impressed along the middle, the fifth having a broader deep parallel impression bounded by tumid sides and not attaining the base, the apical margin with a feeble shallow rounded sinus, the impression narrowly shining and glabrous along the median line; sixth ventral broadly, feebly lobed at tip, the lobe with a small shallow rounded sinus at its middle, the surface tumid apically and impressed basally at the middle, the lateral slopes of the tumidity more densely clothed with black pubescence; female with the sixth ventral strongly lobed at apex, the lobe evenly rounded. Length 8.0.–9.6 mm.; width 1.1 mm. Iowa and Missouri.....................**brevipenne** Lec.

Body shorter and much stouter, black in color throughout, the legs and antennae dark rufous; head shorter and broader in form, large, much wider than the elytra in both sexes, the eyes nearly similar, the sides behind them shorter, parallel and arcuate, the basal angles very broadly rounded; antennae stout and filiform; gular sutures feebly arcuate, the punctures coarse and less sparse; prothorax slightly longer than wide, slightly narrower than the head, only slightly narrowed from the apical angles, which are broadly rounded, to the basal angles which are also notably rounded, the punctures coarse but much more close-set, the median smooth line much narrower; elytra about three-fifths as long as the prothorax in both sexes and distinctly narrower, the sides more strongly diverging from the more broadly rounded basal angles and very feebly arcuate; punctures strong and sparse and irregularly disposed; abdomen shining, parallel, as wide as the elytra, finely and not very closely punctate. Male with ventrals two to four wholly unmodified, the fifth very feebly impressed along the middle from apex to base, gradually more narrowly to the base, the bottom not glabrous along the median line and the sides not tumid, the apex feebly sinuate along the impression in about median third; sixth segment almost unmodified, having a rather narrow and very feeble parallel impression along the middle throughout, the apex very broadly, feebly arcuate, the middle third becoming gradually very feebly sinuato-truncate; female with the sixth ventral moderately lobed at tip, the lobe rather narrowly rounded. Length 8.0 mm.; width 1.28 mm. North Carolina (Highlands)..**carolinae** n. sp.

The second species differs very greatly from *brevipenne* in in its shorter and broader form, more broadly rounded angles of the head, prothorax and elytra, radically in the sexual characters, and, to an unexpected degree, in the form of the gular sutures.

Abletobium n. gen.

This genus is founded upon a rather small species, having some characters which ally it rather closely with *Apteralium*. The short elytra are flat and appear to be very closely joined along the suture, as though it also might be apterous, but the basal angles are more distinctly defined, although slightly rounded. In its large head it also reminds us of the preceding genus and the very small eyes are perhaps suggestive of *Glyptomerus*. The type and only known species may be described as follows from the male: —

Form parallel, moderately convex, the elytra depressed, uniform pale testaceous in color throughout the body, legs and antennae and shining in lustre; head large, very much wider than the prothorax or elytra, the sides behind the very small anterior eyes parallel and broadly, evenly arcuate, the basal angles very broadly rounded, the base becoming transverse along the neck; antennae rather long, though somewhat shorter than the head and prothorax, thick and filiform, the joints obconic, the basal joint moderately stout; prothorax rather narrow and distinctly elongate, the sides feebly but evidently converging from the distinct, though evenly rounded, apical angles to the similarly rounded basal angles and straight, the punctures similar to those of the head, rather small but distinct, moderately sparse and irregularly disposed, the smooth median line not defined by series; elytra as long as wide, distinctly shorter and wider than the prothorax, the sides evidently diverging from the very narrowely rounded basal angles and straight the punctures not very fine but feeble, sparse and confusedly arranged; abdomen parallel, fully as wide as the elytra, rather shining, the punctures very fine, somewhat close-set but not dense; dorsal segments not transversely impressed at base; legs rather long and slender. Male with simple secondary sexual characters, the surface of the fifth and sixth segments wholly unmodified, the apex of the sixth with a large rounded sinus in median half, the sinus about four times as wide as deep. Length 5.8 mm.; width 0.85 mm. Massachusetts, — Mr. F. Blanchard .... **pallescens** n. sp. (Fvl. MS.)

I do not have the female before me at present, but it probably does not differ materially in general form. The pale color of the type may be partially due to immaturity.

Lathrobium Grav.

The general aspect of the numerous species of *Lathrobium*, when compared with the related genera below, is stout, compactly built and large or moderately large in size. There is marked uniformity in these respects, giving the species a habitus which enables us to generically identify them at once; but in many characters, even those of the gular sutures and antennae, there is notable variety. The contrast between the extremely thick antennae of *armatum* and related species, and the long slender filiform antennae of *gravidulum*, for example, is very remarkable, and, in the related genus *Litolathra*, the antennae are still longer and more slender. The gular sutures vary notably, from approximate and distinctly converging posteriorly, to widely separated and parallel; they are always straight or very nearly so however. The elytra are sometimes distinctly wider and longer than the prothorax in both sexes, but are frequently much shorter than the prothorax, in which case the wings are probably more or less curtailed or aborted. In the *armatum* group, and, in all probability to a greater or less degree throughout the genus, there is very little difference in form of the body or relative size of the elytra in the two sexes, but, as far as noted, the female is a little smaller and narrower than the male, in opposition to a somewhat general rule. The species are very abundant but have never been carefully worked out, even in the European fauna, and have never been thoroughly collected in America. They are especially abundant in the northern Atlantic districts and appear to be somewhat local in habitat.* Those species represented by material in my cabinet may be described as follows: —

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* Of those Lathrobia not having a pleural fold on the elytra, I have collected 11 species in less than two weeks of August, on a small area of about 100 acres in Rhode Island, and, from Mr. F. Blanchard, have received 19 species taken in the immediate vicinity of Lowell, Mass. Only 6 species are common to these series, owing perhaps to the decidedly warmer climate of the southern New England coast, but enough can be inferred from this to prove that we hardly yet begin to know the species.

Antennae extremely stout, attenuated toward tip, the middle joints never longer than wide, rounded at the sides and strongly constricted at base; body generally larger and stouter, the legs rather stout....... 2

Antennae stout, with the joints not distinctly longer than wide, but obconic in form, the legs moderately stout........................ 9

Antennae stout to moderately slender, generally rather shorter than the head and prothorax, the joints distinctly elongate and obconic; legs relatively rather slender to stout in form.........................14

2 — Elytra bicolored, black basally and red apically..................... 3

Elytra unicolorous, black 6

3 — Elytra distinctly longer and wider than the prothorax in both sexes, black, shining, the elytra bright rufous, becoming black in basal two-fifths; legs dark rufous, the antennae piceo-testaceous; head distinctly wider than the prothorax in both sexes, nearly as wide as the elytra in the male, evidently narrower in the female; eyes at between two and three times their length from the base, the angles well rounded; width a little before the angles slightly greater than at the eyes; neck three-fifths as wide as the head; gular sutures rather narrowly separated, feebly converging to the base; prothorax about a fourth longer than wide, the angles all obviously rounded; the sides very feebly converging and nearly straight; punctures like those of the head, rather coarse, deep, irregular in arrangement and moderately sparse, broadly sparse toward the middle of the head, the median smooth thoracic line not defined by punctured series; elytra large, parallel, slightly longer than wide, the punctures coarse, deep, moderately sparse and arranged in very irregular series; abdomen parallel, slightly narrower than the elytra, finely and only moderately closely punctulate; legs moderately stout. Male with the fourth and fifth ventrals narrowly and very feebly impressed along the median line, the sixth also similarly impressed along the middle toward base but very narrowly swollen toward apex, the latter rectilinearly truncate, with a very small median sinus wider than deep, the edges of which are callous and polished; surface of the sixth segment more finely and sparsely punctulate and pubescent, except the lateral slopes of the apical tumidity, which are clothed with stiff black hairs; sixth segment of the female rather narrowly lobed at tip. Length 10.0 mm.; width 1.5 mm. New York (Hudson Valley)..**amplipenne**

Elytra equal or subequal in length to the prothorax.................... 4

Elytra distinctly shorter than the prothorax........................... 5

4 — Elytral punctures rather small, feebler and sparser and arranged in rather well defined series; body stout, parallel, shining, black, the elytra, — gradually and nubilously toward apex — and the legs throughout, rufous; antennae rufo-piceous; head large, only very slightly wider near the base than at the eyes, the latter moderate; angles not very broadly rounded; neck three-fifths as wide as the head, the punctures moderately coarse, deep and sparse toward the sides, very remotely scattered elsewhere; prothorax unusually large, scarcely visibly narrower than the head, about a fifth longer than wide, the sides very feebly converging posteriorly throughout and nearly straight, the angles narrowly rounded at apex, broadly at base; punctures coarse but not very deep,

impressed and sparse; elytra fully as long as the prothorax, at base equal in width to the latter but a little narrower than the head, the sides sensibly diverging from the basal angles to the apex and nearly straight, slightly longer than wide, the punctures impressed; abdomen broad, parallel, as wide as the elytra, minutely and not very closely punctulate; legs moderately long and stout. Male unknown, the sixth ventral of the female broadly and obtusely lobed at apex. Length (contracted) 7.8 mm.; width 1.4 mm. New Jersey..**subaequale** n. sp.

Elytral punctures closer, more distinct and not so obviously seriate; form less stout, similar in coloration, the elytra gradually becoming rufous in apical third; head much smaller, with the basal angles more broadly rounded, equal in width to the prothorax and slightly narrower than the elytra, the sides more nearly parallel, similarly punctate; prothorax smaller but otherwise nearly similar, the punctures rather stronger and less sparse; elytra smaller, subparallel or only slightly broader behind, not quite as long as the prothorax and distinctly wider throughout, about as long as wide; abdomen as wide as the elytra, finely and moderately densely punctulate; legs nearly similar. Male with the fourth and fifth ventrals wholly unmodified, the sixth with a very narrow and feeble impression along the median line, extending to about apical third, the surface thence unmodified to the rectilinearly truncate apex, except a very small feeble narrow tumidity at the margin, the edge not distinctly modified. Length 10.0 mm.; width 1.3 mm. Illinois, New York and Ontario..................................**procerum** n. sp.

5 — Form less stout than in the preceding species, rather strongly convex and almost exactly parallel, polished, piceous-black in color, the elytra rufous, becoming black near the base; legs rufous, the antennae piceous; head large, quite distinctly wider than the elytra, slightly broader near the base, the basal angles only moderately rounded; punctures sparse but deep toward the sides, very remote elsewhere; prothorax distinctly narrower than the head, a fourth longer than wide, slightly narrowed posteriorly throughout, the angles rounded, the punctures sparse, coarse and deep; elytra small, quadrate, subparallel, equal in width to the prothorax and much shorter, very coarsely, only moderately sparsely and irregularly punctate; abdomen parallel, not quite as wide as the elytral apex, minutely and not very closely punctulate; legs stout. Male unknown; female with the sixth ventral obtusely produced and roundly lobed at apex. Length 8.5 mm.; width 1.1 mm. New Jersey, — Prof. J. B. Smith..................**praelongum** n. sp.

6 — Elytra more or less obviously longer and wider than the prothorax in both sexes.. 7

Elytra equal in length to the prothorax or a little shorter; legs rufous throughout.. 8

7 — Large species, the legs rufous in color, shining, the antennae rufopiceous; punctures of the head and pronotum coarse, deep and moderately sparse, of the elytra sensibly smaller but equally sparse, tending to serial arrangement, of the abdomen very fine and rather dense; head not quite as wide as the elytra, broader behind than at the eyes, the angles only moderately broadly rounded; gular sutures approximate, converging basally; prothorax oblong, only very slightly narrower than

the head, not more than a sixth longer than wide, the sides not distinctly converging and very feebly arcuate, the angles rounded as usual; elytra large, rather longer than wide, somewhat longer and wider than the prothorax, parallel; abdomen parallel, slightly narrower than the elytra; legs rather long and only moderately stout. Male with the fifth ventral entirely unmodified, the sixth narrowly and very feebly impressed in the middle in nearly basal two-thirds, thence longitudinally and obtusely tumid along the median line to the apex, which is truncate, with a very minute, simple and shallow median sinus, five or six times as wide as deep; female slightly more slender than the male. Length 9.5 mm.; width 1.5 mm. New York (Hudson Valley) .... **deceptivum** n. sp.

Smaller species, the legs and antennae dark piceo-rufous, the surface shining, the head and pronotum coarsely deeply and moderately sparsely punctate, the punctures sparser toward the middle of the head, with the smooth line of the pronotum as usual, those of the elytra slightly smaller and rather sparser, not very definitely lineate, of the abdomen minute and very close-set; head well developed, a little wider than the elytra in the male, subequal to the latter in the female, wider near the base than at the eyes, the angles moderately rounded; gular sutures less approximate; prothorax rather small, distinctly longer than wide and much narrower than the head, the angles somewhat distinct, the sides feebly converging and nearly straight; elytra nearly a fourth longer than wide, much wider and longer than the prothorax, parallel and nearly straight at the sides; abdomen somewhat narrower than the elytra, parallel. Male with the fifth ventral scarcely visibly flattened along the median line, the sixth rather widely but very feebly impressed throughout in continuation, the apex with a very broad shallow sinus in almost median half and fully four times as wide as deep, the bottom of the sinus transverse and with two very feeble rounded lobes, having an intermediate minute and very feeble sinus; female with the sixth ventral very broadly, obtusely lobed at apex. Length 7.0 mm.; width 1.15 mm. Massachusetts, — Mr. F. Blanchard — and Michigan (Detroit) .... **spissicorne** n. sp.

8 — Form very stout, parallel, the elytra scarcely as long as wide; legs rather short and very stout; head large, equal in width to the elytra and very slightly wider than the prothorax, formed as usual, the coarse punctures very remote except toward the sides; prothorax as usual, large, only slightly longer than wide, the punctures coarse, deep and sparse, the sides feebly converging; elytra a little shorter and slightly wider than the prothorax, coarsely and rather confusedly punctate; abdomen very broad, as wide as the elytra, parallel, finely, rather densely punctulate. Male with the fifth ventral wholly unmodified, the sixth with a narrow and very feeble impression on the median line in more than basal half, the surface very broadly and just visibly swollen thence to the rectilinearly truncate and wholly unmodified apex, the pubescence a little denser at each side of the swelling; female slightly narrower than the male, with the sixth segment feebly and broadly lobed at tip. Length 9.0 mm.; width 1.5 mm. Massachusetts,— Mr. F. Blanchard, New York (Long Island) and New Jersey (Orange) .... **nigrolucens** n. sp.

Form narrower and more elongate, the elytra fully as long as the prothorax, slightly longer than wide and with the sides diverging feebly from the basal angles throughout; legs stout; integuments coarsely and sparsely punctate anteriorly, the punctures of the elytra smaller, irregularly disposed, of the abdomen very fine and moderately close-set; head in the male as wide as the base of the elytra but narrower than the apex, formed as usual but with the sides more rounded toward base; prothorax subequal in width to the head and base of the elytra, distinctly longer than wide, feebly narrowed from apex to base; abdomen as wide as the elytra, parallel. Male with the fifth ventral wholly unmodified, the sixth narrowly flattened along the median line toward base, the surface feebly and narrowly prominent in the middle at apex, the latter rectilinearly truncate and unmodified throughout; female with the sixth segment feebly lobed at tip. Length 9.8 mm.; width 1.4 mm. Illinois..**armatum** Say

9 — Head large, as wide as the elytra or wider; gular sutures moderately separated, straight and parallel; elytra bicolored, red, black toward base.. 10

Head small, narrower than the elytra, with more broadly rounded basal angles; elytra uniform in color throughout and concolorous........ 11

10 — Form rather stout, parallel, normally convex, shining, black, the elytra and legs bright rufous, the former black in rather less than basal half toward the suture and less toward the sides; antennae obscure rufous; head large, slightly wider near the base than at the eyes, the latter moderate, the sides nearly straight with the angles moderately rounded; punctures coarse, rather close-set toward the sides, almost wanting on the vertex; prothorax a fourth longer than wide, much narrower than the head, feebly narrowed posteriorly throughout, the sides nearly straight, the angles rather well rounded; punctures coarse, moderately sparse, confused, the smooth median line not defined by punctured series; elytra more depressed, slightly elongate, about as long as the prothorax and slightly wider, the sides nearly straight and feebly diverging from base to apex, the punctures less coarse than those of the prothorax, rather sparse and confused; abdomen parallel, not quite as wide as the elytral apex, the punctures minute and close-set. Male wanting; female with the apex of the sixth ventral very broadly rounded and briefly lobed. Length 7.0 mm.; width 1.1 mm. British Columbia..**divisum** Lec.

Form nearly similar but more slender, the coloration, lustre and sculpture similar, except that the punctures throughout are somewhat sparser; head not so large, the sides parallel and nearly straight for almost twice the length of the eyes behind the latter, the angles right and moderately rounded as usual; antennae rufous, not as long as the head and prothorax, thick, filiform, the median joints very slightly longer than wide; prothorax nearly as in *divisum* but only slightly narrower than the head, very feebly narrowed from apex to base; elytra slightly wider than the prothorax, equal in length to the latter in the female, a very little shorter in the male, slightly longer than wide, the sides feebly diverging from the base; abdomen as in *divisum*. Male with the fifth and sixth ventrals unimpressed, the latter broadly arcuato-truncate at apex, the surface at the apex with two small approximate tufts of short stiff black setae; female very nearly similar to the male, except the slightly longer elytra with more diverging sides, the sixth ventral evenly rounded and rather broadly lobed at tip. Length 6.5 mm.; width 0.9 mm. California (Mendocino and Sta. Cruz Cos.)..**franciscanum** n. sp.

11 — Gular sutures moderately separated and strongly converging posteriorly to the base. Body elongate and rather slender, more depressed than in the preceding species, parallel, dark and uniform piceous in color throughout, the legs and antennae rufous; surface shining; punctuation coarse, deep and sparse anteriorly, the smooth line of the pronotum sometimes subobliterated anteriorly and with its surface more or less uneven toward base; head suboval, fully as long as wide, the sides parallel and feebly arcuate, the angles broadly rounded to the neck; prothorax slightly elongate, a little wider than the head, parallel, the sides feebly arcuate, the angles rather distinct; elytra small and depressed, not quite as long as wide, distinctly shorter than the prothorax, somewhat wider than the latter at base and distinctly so at apex, the diverging sides nearly straight, the basal angles distinct, the punctures not very coarse, very sparse and confused; abdomen parallel, as wide as the elytral apex, the punctures minute and rather dense. Male unknown; female with the sixth ventral narrowly and strongly lobed at tip, the lobe narrowly rounded, the surface feebly and narrowly impressed along the middle. Length 7.5 mm.; width 1.1 mm. New Hampshire. **picescens** n. sp.

Gular sutures widely separated, straight and parallel to the base........ 12

12 — Elytra very much shorter than the prothorax, with the straight sides strongly diverging from base to apex and the surface rather depressed. Body elongate, only moderately stout, shining, black throughout, the legs and antennae rufous; punctures coarse and sparse anteriorly, those of the elytra notably fine, very sparse and confused, of the abdomen minute and dense; head longer than wide, the sides parallel and nearly straight for a long distance, the basal angles only moderately broadly rounded; prothorax wider than the head, distinctly elongate, parallel, the sides broadly, feebly arcuate, the angles rather distinct, the broad median smooth area even, generally slightly impressed along the median line toward base; elytra at base as wide as the prothorax or slightly wider, at apex very distinctly wider, about as long as wide, strongly and angularly emarginate at tip; abdomen parallel, scarcely as wide as the elytral apex. Male unknown; female with the sixth ventral strongly and rather narrowly lobed at tip, the apex of the lobe rather broadly rounded, the surface feebly impressed or flattened in the middle toward tip. Length 7.8 mm.; width 1.0 mm. Wisconsin (Bayfield), Montana (Kalispell), and Idaho (Coeur d'Alène),— Mr. Wickham.. ....**longiventre** n. sp.

Elytra not so greatly abbreviated and rather less strongly emarginate at apex, with the sides subparallel and the surface less depressed......13

13 — Body rather stout, subparallel, deep black throughout, the legs and antennae dark piceo-rufous; punctures of the head and pronotum deep and distinct, sparse but only moderately coarse, of the elytra fine, sparse and confused, of the abdomen minute and close-set as in *longiventre;* head slightly elongate, the sides parallel and straight for only half the

distance to the base, then broadly rounded to the neck; prothorax slightly elongate, wider than the head, the sides parallel and scarcely arcuate; elytra scarcely as long as wide, distinctly wider than the prothorax at base and apex; abdomen as wide as the elytra. Male unknown; female with the sixth ventral strongly and rather narrowly lobed at tip, the lobe evenly and strongly rounded at apex, with its surface rather strongly convex and not at all impressed. Length 7.0 mm.; width 1.1 mm. British Columbia....................**vancouveri** n. sp.

Body smaller, parallel, moderately stout, shining, piceous-black in color, the legs and antennae pale rufous, sculptured nearly as in *vancouveri*, the punctures anteriorly fully as small and still sparser, those of the abdomen even denser; head notably elongate and oval, the sides parallel and broadly arcuate, rounding more strongly at base to the neck; prothorax distinctly wider than the head, oblong, parallel, slightly elongate; elytra distinctly longer than wide, a little wider than the prothorax throughout and only very slightly shorter; abdomen parallel, as wide as the elytra. Male unknown; female with the sixth ventral nearly as in *vancouveri*. Length 5.7 mm.; width 0.9 mm. Illinois.
illini n. sp.

14 — Species of the *simile* type, parallel or subparallel, rather large in size, the antennae moderate in length and frequently stout, the elytral punctures more or less fine, sparse and inconspicuous, the male ventral characters conspicuous, the fifth and sixth segments more or less strongly impressed, the latter also with a large distinct apical emargination..15

Species of the *simplex* type, parallel, the antennae but little less stout and rather more elongate than in the preceding, rather large; ventral characters of the male inconspicuous, consisting of a very minute nick at the middle of the apex of the truncate sixth segment and generally a very fine linear impression of the disk; elytral punctures generally coarse, strong and conspicuous, the legs relatively more slender than usual..20

15 — Elytra as long as the prothorax....................................16

Elytra always shorter than the prothorax in both sexes..................17

16 — Form stout, black, the elytra slightly piceous, the legs and antennae dusky testaceous, shining; head small, the sides parallel and straight or very feebly arcuate for a long distance behind the eyes, the angles broadly rounded; punctures not very coarse and extremely sparse, a little less so at the sides; antennae thick, the medial joints strongly obconic and less than one-half longer than wide; neck a little more than half as wide as the head; gular sutures widely separated, almost straight and parallel; prothorax large, but little longer than wide, distinctly wider than the head and correspondingly narrower than the elytra, gradually feebly narrowed behind from apex to base; punctures sparse, very much coarser than those of the head; elytra exactly quadrate, parallel, equal in length to the prothorax, finely, sparsely and inconspicuously punctate; abdomen not quite as wide as the elytra, minutely and very densely punctulate, dull in lustre. Male unknown; female with the sixth ventral very broadly, obtusely lobed at apex, the surface strongly convex, wholly unimpressed. Length 7.0 mm.; width 1.2 mm. Massachusetts, — Mr. Blanchard — and Canada.
obtusum n. sp. (Fvl. MS.)

Form very stout, shining, black throughout, the legs and antennae dull rufous; head and elytra rather finely, very sparsely punctate, the pronotum hardly more coarsely and also very sparsely, the abdomen minutely and densely punctulate; head small, longer than wide, the sides parallel and feebly arcuate, the angles broadly rounded; antennae thick, the strongly obconic medial joints one-half longer than wide; gular sutures moderately separated and feebly converging to the base; prothorax broad, much wider than the head, slightly longer than wide, the sides very nearly parallel, the angles rather rounded; elytra large, distinctly wider and a little longer than the prothorax, slightly longer than wide, subparallel, the sides feebly arcuate, the surface rather broadly impressed at each side of the suture; abdomen not quite as wide as the elytra. Male with a distinct parallel impression in about middle sixth of the fifth ventral, the sixth with a narrower, deeper and more anteriorly attenuated impression, the apex having a triangular emargination about as deep as wide, occupying the posterior part of the impression, the edges of the notch thin, pale and membranous at the bottom; female unknown. Length 7.3 mm.; width 1.4 mm. Manitoba (Winnipeg)..............................**sparsellum** n. sp.

17 — Elytra not wider than the prothorax and very much shorter, the form of the body more elongate and parallel..................................18

Elytra slightly wider than the prothorax and only a little shorter; body stouter and less parallel..19

18 — Elytra depressed, scarcely as long as wide, with the sides diverging from the base; body black, shining; punctures of the head and elytra rather small, sparse, those of the pronotum much coarser, only moderately sparse, of the abdomen minute and very dense, the surface dull in lustre; head moderate in size, the eyes at nearly three times their own length from the base; angles broadly rounded, the sides parallel and more or less arcuate; antennae stout, with the strongly obconic joints one-half longer than wide; prothorax large, a little wider than the head, oblong, with the sides parallel and very slightly arcuate; elytra small, barely as long as wide, depressed, the sides nearly straight and very feebly diverging from the base; abdomen fully as wide as the base of the elytra. Male with the fifth ventral impressed in less than median third, the impression wider than long, rounded anteriorly, not quite attaining the base, the apex with a rounded shallow sinus bounding the impression; sixth ventral with a narrower longitudinal impression, the apex with a large, evenly rounded sinus, slightly wider than deep and equal in width to the impression, the edges of the sinus narrowly glabrous at the bottom, the impression clothed with short, very stout spiculiform hairs. Length 8.0 mm.; width 1.1 mm. New Hampshire (White Mts.)..................................**washingtoni** n. sp.

Elytra normally convex, parallel, exactly quadrate; body polished, black throughout, the legs bright, and the antennae dusky, rufous; head moderate, the sides feebly arcuate, the angles broadly rounded; antennae stout as in *washingtoni;* prothorax large, slightly wider than the head, only slightly elongate, somewhat narrowed from apex to base, the punctures much coarser than those of the head and elytra, which are rather small, sparse; elytra equal in width to the prothorax and distinctly shorter; abdomen not quite as wide as the elytra. Male with the third and fourth ventrals narrowly and very feebly impressed along the middle, the fifth more broadly and deeply so, the impression attenuate anteriorly and not attaining the base, the apex with a shallow, circularly rounded sinus in median third; sixth ventral narrowly and deeply impressed along the median line except near the base, the apical margin with a large and very deep angulate notch, the bottom of which is filled with a broad whitish submembranous area having a transverse or feebly sinuate posterior outline; impressions more coarsely pubescent or spiculose. Length 8.8 mm.; width 1.15 mm. Rhode Island (Boston Neck).......................................**rigidum** n. sp.

19 — Male with ventrals three to six impressed, the sixth with a narrow and deep emargination. Body parallel, shining, black or slightly piceous, the elytra gradually rufescent posteriorly; legs and antennae as in the preceding species; head parallel and broadly arcuate at the sides, the latter merging gradually into the broadly rounded basal angles, the punctures fine but deep and very sparse; strongly obconic medial joints of the antennae but little more than one-half longer than wide; prothorax broad, but slightly elongate, a little wider than the head, subparallel, the sides becoming straight in the middle; punctures very sparse and only moderately coarse; elytra fully as long as wide, parallel and feebly arcuate at the sides, slightly wider and shorter than the prothorax, the punctures like those of the head, fine and very sparse; abdomen nearly as wide as the elytra. Male with the impression of the third and fourth ventrals narrow and feeble, of the fifth wider, deeper and elongate-oval, the apex feebly, broadly sinuate in the middle, the sixth with a large deep triangular emargination about as deep as wide, with its edges glabrous anteriorly, the impressions spiculose as usual; female with the sixth ventral rather small, feebly lobed at tip. Length 8.5 mm.; width 1.2 mm. Rhode Island (Boston Neck).
postremum n. sp.

Male with ventrals three and four wholly unmodified; five and six impressed, the sixth with a very broad sinus much wider than deep. Body parallel, stouter in form than *postremum*, polished, black, the elytra gradually rufo-piceous posteriorly as a rule; head subquadrate, the sides parallel and feebly arcuate, the angles rather broadly rounded, the punctures fine and very sparse; antennae stout, the strongly obconical joints one-half longer than wide; prothorax large, oblong, distinctly wider than the head, but little longer than wide, very feebly narrowed posteriorly from the rounded apical angles, the punctures coarse and very sparse; elytra subquadrate, parallel, slightly shorter and wider than the prothorax, normally convex, rather finely, very sparsely and confusedly punctate; abdomen as wide as the elytra, minutely and densely punctulate. Male with the fifth ventral narrowly and deeply impressed along the middle except near the base, the apex broadly, feebly sinuate toward the middle; sixth with a broader, deep, more anteriorly narrowed impression throughout, the apex with a broad and rather shallow sinus, three or four times as wide as deep, its bottom broadly, very obtusely angulate, the sinus fully half as wide as the segment; female with the sixth ventral obtusely lobed at tip,

unimpressed. Length 7.5–9.0 mm.; width 1.15–1.25 mm. Massachusetts (Lowell), Rhode Island (Boston Neck — a slightly larger and more vigorous variety), New York (near the city) and New Jersey.
simile Lec.

20 — Sinus at the tip of the sixth ventral in the male larger, about a fifth as wide as the segmental apex 21

Sinus extremely minute 22

21 — Body larger and stouter, parallel, black and polished throughout, the legs and antennae rufo-piceous; head rather well developed, the sides parallel for half the distance behind the eyes, then broadly rounded to the neck, becoming almost transverse just before attaining the latter, the punctures rather coarse and sparse; antennae longer than in the *simile* group, the obconic joints almost twice as long as wide; prothorax oblong, parallel, only slightly elongate and but little wider than the head, the angles well rounded, the punctures coarse, rather sparse and confused; elytra slightly wider than the prothorax and distinctly shorter, barely as long as wide, with the sides very feebly diverging from base to apex in the male, subequal in length to the prothorax, fully as long as wide and more parallel in the female, the punctures coarse, uneven and sparse; abdomen as wide as the elytra, minutely and relatively sparsely punctulate, polished. Male with the fifth ventral unmodified, the sixth rectilinearly truncate at tip, with the evenly rounded sinus wider than deep and a fifth as wide as the apex, the surface not obviously impressed along the middle; female with the sixth ventral broadly, obtusely rounded at tip. Length (extended) 8.0 mm.; width 1.15 mm. Rhode Island (Boston Neck).
neglectum n. sp.

Body smaller and less stout, parallel, shining, black throughout, the legs and antennae dusky testaceous; head as in *neglectum*, but more narrowly ovoidal, the sides more gradually approaching the neck and not becoming transverse, the punctures less coarse and still sparser and the antennae somewhat shorter, the medial joints obviously less than twice as long as wide; prothorax smaller, narrower and just visibly wider than the head, the sides slightly converging from the less broadly rounded anterior angles to the basal angles, the punctures equally coarse and sparse; elytra obviously wider than the prothorax, subparallel, a little longer than wide and about as long as the prothorax in both sexes, the punctures coarse, uneven and only moderately sparse; abdomen broad, fully as wide as the elytra, minutely and not very closely punctulate. Male with the fifth ventral unmodified, the sixth rectilinearly truncate at apex, with a rounded sinus, wider than deep and about a fifth as wide as the apex, the surface narrowly and distinctly impressed along the median line from before the middle to the apical sinus; female as in *neglectum*. Length (contracted) 6.5 mm.; width 1.0 mm. Michigan (Marquette) ....**innocens** n. sp.

22 — Form relatively larger and more elongate, parallel, black and shining throughout, the elytra sometimes piceous, the legs and antennae dusky rufous; head and antennae nearly as in *innocens* but larger; prothorax broad, only very slightly elongate, very much wider than the head, the sides distinctly converging posteriorly from the arcuation at apical

third or fourth, the punctures notably coarse, confused and moderately sparse, the median smooth line even; elytra in the male short, barely as long as wide, not wider than the prothorax at base and only slightly wider at apex, the sides diverging noticeably; in the female much larger, fully as long as wide, nearly as long as the prothorax and much wider, slightly wider at apex than at base, the prothorax relatively narrower in that sex; punctures notably coarse, uneven and moderately sparse; abdomen not quite as wide as the elytra, minutely and not very closely punctulate. Male with the sixth ventral very narrowly, linearly and distinctly impressed along the middle in posterior two-thirds, the apex rectilinearly truncate, with the median sinus very small, rounded, wider than deep as usual and only about a ninth or tenth as wide as the apex. Length 7.5 mm.; width 1.1 mm. Lake Superior,— LeConte; Wisconsin (Bayfield), — Mr. Wickham. [= *fauveli* Duviv.] .... **simplex** Lec.

Form relatively stouter, polished, black throughout, the legs and antennae dusky testaceous; head as in *simplex* but relatively larger, the punctures coarse, rather close-set toward the sides, very sparse medially, the antennae rather longer than in any of the other species of this group, the medial joints in the male being scarcely less than twice as long as wide, a little shorter in the female; prothorax oblong, scarcely narrowed posteriorly, distinctly longer than wide and subequal in width to the head in both sexes, coarsely, sparsely punctured; elytra similar in the sexes, parallel, distinctly longer than wide, much wider than the prothorax and equal in length to the latter, the punctures moderately coarse and rather feeble, sparse; abdomen broad, fully as wide as the elytra, the fine punctures less sparse than usual in this group. Male with the sixth ventral distinctly, linearly impressed along the median line in apical two-thirds, the apex as in *simplex*, the median sinus still more minute and only about a twelfth as wide as the apex. Length (contracted) 6.5 mm.; width 1.15 mm. Massachusetts (Lowell),— Mr. F. Blanchard .... **gravidulum** n. sp.

The under surface of the first joint of the hind tarsi, in many of the Lathrobia having this joint very short, and especially in *Lathrobium* and its immediate allies, is obliquely prolonged beneath the second, slightly expanded and has a flattened sole, as though to aid in the use of the tarsus. This sole does not exist on any of the other joints, leading to the presumption that, in motion, this short basal joint may be the only one in contact with the ground, the remainder of the tarsus being elevated or resting on the tips of the claws.

The species of the *armatum* group, having peculiarly thick and submoniliform antennae, slightly attenuated at the tip, are difficult to discriminate, and it is possible that a few of the forms here announced may have less than full specific value. Of *amplipenne* I have a good series of about a dozen specimens, in which the coloration of the elytra is perfectly constant, except in one individual, where the red is replaced by a piceous-black; as the other specimens are constant, this dark coloration may be accidental.

There is no group of species known to me, showing more plainly the subgeneric value of types of male secondary sexual characters, than these components of *Lathrobium*, for we have successions of what are without doubt distinct, though closely related, species, having throughout the same type of sexual modifications, which types are abruptly limited in extent and without intermediates, as shown by the above table.

The name *simplex* was replaced by *fauveli* by M. Duvivier, (Cat. 1883) on the ground of preoccupation, but I am by no means certain that the older *simplex* is really a *Lathrobium*, and therefore have not made the change of name.

There are four described species of *Lathrobium* which are not before me at present: these are appended below with short descriptions which I drew up some years ago from the original unique types. They are all very distinct species and will undoubtedly have to be removed from the restricted genus *Lathrobium*, but having failed to record any observations upon the elytral flanks, gular sutures or structure of the hind tarsi, I am unable to dispose of them among the other genera at present, and indeed some of them are so isolated as to indicate new genera. For the present however they may be attached to *Lathrobium*:—

Form moderately slender, parallel, head gradually and slightly narrowed behind the eyes to the neck, which is broad, the surface coarsely and remotely punctate; antennae not very thick, as long as the head and prothorax, the latter about as long as wide, equal in width to the head, the punctures coarse, sparse and rather feebly impressed; elytra about as long and wide as the prothorax, the punctures very coarse, not close-set and rather feebly impressed, arranged in series throughout; abdomen finely and sparsely punctulate. Male having a feeble, transversely oval medial impression on the fourth ventral — possibly accidental, — the fifth very minutely, feebly sinuate and extremely feebly impressed at apex, the sixth with a broad angular emargination, occupying the entire apex and at least five times as wide as deep. Length 5.7 mm.; width 0.9 mm. North Carolina .... **seriatum** Lec.

Form subparallel and rather stout, convex, dark rufo-testaceous, the head blackish; elytra rufous, with a large median blackish cloud extending from the base, where it is nearly as wide as the elytra, to the apex, where it has gradually become narrower; head parallel, very coarsely and remotely punctate; prothorax as long as wide, equal in width to the head, the punctures rather large, sparse and irregularly disposed, except single series along the median smooth line; elytra just visibly wider than the prothorax and distinctly longer, nearly as long as wide, the punctures not fine, rather sparse and partially arranged in series almost throughout; abdomen finely and sparsely punctulate. Male unknown. Length 6.4 mm.; width 1.1 mm. Florida..............**parcum** Lec.

Form rather stout, parallel; head large, wider than prothorax, parallel, not very coarsely but deeply, rather closely punctate, the antennae thick, submoniliform, almost as long as the head and prothorax, the latter about a fifth longer than wide, distinctly narrower and a little shorter than the elytra, the sides feebly convergent and nearly straight from apex to base, the punctures small, feeble, rather close-set and irregularly arranged throughout, with a wide median impunctate line; elytra somewhat longer than wide, the punctures fine, feeble, sparse and confused; abdomen very finely, rather densely punctulate; legs pale. Male with the fifth and sixth ventrals wholly unmodified on the disk, the apex of former very broadly, angularly emarginate, the latter somewhat more deeply and angularly emarginate, both throughout the entire width, the latter emargination apparently about six times as wide as deep. Length 8.0 mm.; width 1.25 mm. Louisiana........**pedale** Lec.

Form slender but convex; sides of the head slightly converging behind the eyes, the basal angles broadly rounded, the punctures very fine, feeble and remotely scattered; antennae slender, distinctly longer than the head and prothorax, the latter wider than the head, just visibly longer than wide, convex, parallel, finely, very feebly, indistinctly, sparsely and irregularly punctate; elytra not wider than the prothorax and distinctly shorter, quadrate, feebly, sparsely and irregularly punctate; abdomen darker in color, finely and extremely densely punctulate, dull in lustre. Male having a rounded discal impression in apical half of the fifth ventral, the apical margin not modified, the sixth segment with a small acutely cuspidiform emargination at tip, the surface not modified. Length 4.5 mm.; width 0.7 mm. Michigan....**bicolor** Lec.

The narrowing of the head behind the eyes in *seriatum*, the peculiar coloration of *parcum* and the sexual characters of *pedale* and *bicolor*, make any definite generic assignment of these species impossible in the absence of the types; it is hoped, however, that enough characters are given to allow of identification in case they should be rediscovered. *Bicolor* is a preoccupied name in *Lobrathium*, but the sculpture of the body is very unlike that prevailing in Rey's genus, where the punctures are especially coarse and close-set throughout in all the species known to me; so the name should stand.

Litolathra n. gen.

This genus, while closely allied to *Lathrobium*, differs in the arcuate form of the gular sutures, which are always widely separated and more remotely so at base than at the middle of the post-oral part of the head. The species are moderately numerous and are much smaller in average size than those of *Lathrobium;* they also have a type of male secondary sexual characters — uniform throughout — differing from anything known in that genus. In addition, the antennae are longer, thinner and more filiform, and the abdomen is rather more tapering toward tip and always very densely punctulate and dull, — characters which also distinguish them from *Lathrobium*. The general build of the body in species of the *concolor* type, suggests more rapid motion in running than in those of the *confusa* type, or in *Lathrobium* or *Lathrobioma*, these being relatively slow in their movements. The species represented by material in my cabinet may be distinguished by the following characters: —

Form elongate, fusoid, the elytra always much longer as well as wider than the prothorax, the legs rather slender; antennae not longer than the head and prothorax, moderately slender, the medial joints less than twice as long as wide 2

Form subparallel, the elytra subequal in length to the prothorax or shorter; legs stouter, sometimes very stout in the male 5

2 — Gular sutures distinctly arcuate, gradually diverging posteriorly from near the middle; head smaller, distinctly narrower than the prothorax 3

Gular sutures almost straight, diverging only very near the base; head almost as wide as the prothorax 4

3 — Color black throughout, the legs and antennae rufous, polished, the abdomen dull; form very slender, the punctures of the head and elytra small, sparse, of the pronotum only moderately coarse and very sparse; head parallel, the basal angles very broadly rounded, beginning at one length of the eye behind the latter; neck fully half as wide as the head; prothorax distinctly elongate, about a fifth longer than wide, the sides parallel, arcuate anteriorly and posteriorly, the angles rather distinct; elytra distinctly longer than wide, parallel, almost a third wider than the prothorax and distinctly longer in both sexes; abdomen slightly narrower than the elytra, tapering behind. Male with the fifth ventral wholly unmodified, the sixth narrow, broadly rounded at tip, with a simple rounded sinus about a third as wide as the apex and between

two and three times as wide as deep, the surface very feebly impressed along the median line except toward base; female with the sixth ventral evenly rounded and feebly lobed at tip. Length 6.4 mm.; width 0.95 mm. Rhode Island (Boston Neck), Massachusetts (Lowell) and New York (near the city)..**rhodeana** n. sp.

Color piceous-black, the elytra dull rufous, blackish toward base, the legs and antennae pale testaceous; form and sculpture similar to the preceding, the elytral punctures more evenly serial in arrangement and the pronotal punctures decidedly coarser and less sparse; head rather less distinctly narrower than the prothorax, with the basal angles similarly very broadly rounded; prothorax a little broader and less elongate; elytra but little longer than wide, about a fourth wider and distinctly longer than the prothorax; abdomen distinctly narrower than the elytra. Male with the sixth ventral narrow, more strongly rounded at tip, with the median sinus similar, the surface not impressed except very obsoletely and in posterior half. Length 5.7 mm.; width 0.85 mm. Rhode Island (Boston Neck)..............................**semirubida** n. sp.

4 — Body somewhat stouter, less fusiform and more parallel, piceous-black throughout, the legs and antennae pale; punctures nearly as in *semirubida*, those of the pronotum sparser; head parallel, the basal angles less broadly rounded than in the preceding species; prothorax only very slightly longer than wide, the sides sensibly converging from apex to base and almost straight; elytra slightly longer than wide, much wider and longer than the prothorax; abdomen narrower than the elytra. Male not at hand; female with the sixth ventral as in *rhodeana*. Length 6.4 mm.; width 1.05 mm. Indiana and westward........**concolor** Lec.

5 — Elytra large, equal in length to the prothorax in the female and but just visibly shorter in the male. Body large and stout, moderately convex, parallel, black throughout, the legs and antennae pale ferruginous; punctures of the head rather coarse, sparse, almost wanting broadly toward the middle, of the pronotum rather smaller and very sparse, irregular, of the elytra still smaller, fine, sparse, partially subserial, the abdomen dull, densely punctulate; head slightly smaller than the prothorax, more distinctly so in the female, parallel and feebly arcuate at the sides, the angles obtuse and narrowly rounded, rather distinct; antennae unusually long and slender, filiform, longer than the head and prothorax, the medial joints obconic and fully twice as long as wide; prothorax large, but little longer than wide, sides distinctly converging from apex to base, the angles moderately rounded; elytra large, distinctly wider than the prothorax, slightly longer than wide and parallel; abdomen broad, as wide as the elytra. Male with the fifth ventral rather broadly and strongly impressed along the middle except toward base, the apical margin broadly, feebly sinuate in more than middle third; sixth segment without impression, the apex rounded, with a large, narrowly rounded parabolic sinus, nearly a third as wide as the segment and nearly as deep as wide; legs throughout very stout; female a little smaller and more slender than the male, the sixth ventral distinctly lobed at apex, the lobe evenly rounded, the legs obviously less stout. Length 6.7–7.5 mm.; width 1.1–1.15 mm. New Jersey, Ohio (Ross Co.) and Iowa..**cruralis** n. sp.

Elytra relatively smaller, always shorter than the prothorax in both sexes; smaller species.. 6

6 — Elytra equal in width to the prothorax; body deep black throughout, the legs and antennae pale ferruginous; form parallel, the integuments thicker; head much narrower than the prothorax, parallel and feebly arcuate at the sides, the angles broadly rounded; neck half as wide, the punctures rather fine, very sparse; antennae relatively thicker than in *cruralis*, although longer than the head and prothorax, the medial joints strongly obconic and somewhat less than twice as long as wide; prothorax only very slightly longer than wide, the sides just visibly converging from apex to base and very feebly arcuate; angles rather broadly rounded; punctures not very coarse but larger than those of the head, very sparse; elytra very nearly as long as wide, at base equal in width to the prothorax, just visibly wider at apex, the punctures fine and rather sparse, not definitely subserial; abdomen as wide as the elytra, dull; legs moderately stout in the male. Male with the fifth ventral unimpressed, the apex very feebly sinuate toward the middle, the sixth segment rounded at tip, with the usual parabolic sinus about a third as wide as the apex and but little wider than deep; female not known. Length 5.6 mm.; width 0.9 mm. Iowa (Iowa City), — Mr. Wickham. **convictor** n. sp.

Elytra obviously wider than the prothorax; body more or less pale piceous in color throughout, the legs and antennae paler and ferruginous, the former notably stout in the male and less so in the female; surface polished, the abdomen dull; form parallel and moderately convex... 7

7 — Elytra in the female distinctly shorter than wide, very much shorter than the prothorax; head much narrower than the prothorax, finely and very remotely punctate, nearly as in the preceding form throughout, the antennae similar, the neck rather wider, a little more than half as wide as the head; prothorax distinctly longer than wide, the sides obviously converging from apex to base, the angles rounded, the punctures noticeably coarse, confused and only moderately sparse; elytra rather depressed, the sides distinctly diverging from the base, the punctures somewhat fine, sparse and confused, but with the surface rather coarsely rugose by oblique light; abdomen not quite as wide as the elytra. Male unknown. Length 5.5 mm.; width 0.8 mm. Iowa....**amputans** n. sp.

Elytra in the female fully as long as wide and but just visibly shorter in the male.. 8

8 — Male with the emargination of the sixth ventral smaller, much shallower, broadly rounded at the bottom, less than a third as wide as the segmental apex and between three and four times as wide as deep; fifth and sixth segments not distinctly modified on the disk, the former rectilinearly truncate at apex.. 9

Male with the emargination of the sixth ventral larger and deeper, but little wider than deep, triangular in form, with the anterior angle narrowly rounded.. 10

9 — Body moderately stout, the head as in *amputans* but with the basal angles rather less broadly rounded, the antennae longer and somewhat thicker, filiform, distinctly longer than the head and prothorax, with the medial joints almost twice as long as wide; punctures rather fine,

very remote, less sparse on the sides; prothorax more distinctly elongate, the sides feebly converging, the surface notably convex and unusually coarsely, deeply and conspicuously punctate, the punctures moderately sparse; elytra distinctly wider than the prothorax and but little, though distinctly, shorter, almost as long as wide, the sides very feebly diverging from the base and slightly arcuate throughout, the punctures fine, sparse and partially sublineate; abdomen broader than in *amputans*, as wide as the elytra. Female not known. Length 5.5 mm.; width 0.9. District of Columbia................**inornata** n. sp.

Body nearly similar in form and coloration but decidedly more slender, the head nearly similar in form and sculpture but only just visibly narrower than the prothorax, the antennae distinctly shorter and relatively thicker, not as long as the head and prothorax, the medial joints scarcely more than a half longer than wide; prothorax notably narrower and more elongate; fully a fourth longer than wide, the punctures very sparse and less coarse; elytra relatively much smaller, fully as long as wide, with the sides feebly diverging, much shorter but only very little wider than the prothorax, similarly sculptured; abdomen a little narrower, fully as wide as the elytra. Male with the emargination of the sixth ventral similar in general form but still shallower and more gradually formed. Length 5.4 mm.; width 0.8 mm. New York (Dundee). **subgracilis** n. sp.

10 — Form moderately stout, the head only very slightly narrower than the prothorax, parallel and feebly arcuate at the sides, the basal angles broadly rounded, the punctures small and very sparse; antennae longer than the head and prothorax, stouter, the strongly obconic medial joints distinctly less than twice as long as wide; prothorax less elongate, a fifth or sixth longer than wide, the sides just visibly converging, the punctures rather fine and very sparse; elytra in the male much wider and distinctly shorter than the prothorax, not quite as long as wide, the sides rather strongly diverging throughout, the punctures fine and moderately sparse; in the female less distinctly wider and shorter than the prothorax, as long as wide, with the sides only very slightly diverging; abdomen not quite as wide as the prothorax in either sex. Male with the fifth and sixth ventrals wholly unmodified on the disk, the former rectilinearly truncate at apex, the sixth rounded at apex as usual, the triangular notch larger, nearly half as wide as the segmental apex and distinctly wider than deep; female rather smaller and more slender than the male. Length 5.3-5.8 mm.; width 0.8–0.9 mm. Massachusetts (Lowell) ....**confusa** Lec.

Form rather stouter, the head relatively more elongate, distinctly narrower than the prothorax, the sides longer and less arcuate and the angles somewhat less broadly rounded; antennae shorter and less stout, not longer than the head and prothorax, the medial joints less strongly obconical but less than twice as long as wide; punctures moderately sparse and distinct toward the sides; prothorax more elongate, a fourth longer than wide, the sides feebly converging and nearly straight, the punctures only moderately coarse and sparse; elytra in the male rather large, much wider and not very much, though distinctly, shorter than the prothorax, fully as long as wide, the sides distinctly diverging;

punctures fine and sparse; abdomen nearly as wide as the elytra. Male with the secondary sexual characters as in *confusa,* except that the apex of the sixth ventral is much more broadly and feebly rounded, with the triangular notch smaller, being about a third as wide as the apex and but little wider than deep. Length 5.6 mm.; width 0.9 mm. New York (near the city) and District of Columbia.....**suspecta** n. sp.

The three distinct groups of species in the above table are represented by *concolor*, *cruralis* and *confusa*, the first two, composed of larger species, having the elytra large, the last, with the elytra small, being composed of a considerable number of much smaller species. The fact stated of certain species of *Lathrobium*, that the female is smaller and more slender than the male, is still more obvious in this genus, being strikingly apparent in *cruralis* and *confusa.*

Lathrobiopsis n. gen.

We begin in this genus a series of groups, well distinguished from those which precede by the longer basal joint of the hind tarsi, this being as long as the second in the present genus and both slightly elongate. In addition to this, the first joint is similar to the second beneath and not swollen into a flattened sole. *Lathrobiopsis* differs very greatly from *Lathrobioma*, which has more the facies of *Lathrobium*, in its depressed form and small prothorax, with the median smooth line partially delimited by impressed series of punctures, large flattened elytra, with regular series of punctures and in other characters as shown in the table; our single representative at present is the following: —

Body slender, distinctly depressed, dark testaceous, the head dusky, the abdomen piceous-black; legs pale flavo-testaceous, the antennae dusky rufous; head quadrate, the sides long, parallel and nearly straight, the basal angles very distinctly right and but very slightly rounded; punctures rather coarse, deep, moderately sparse, a small vertexal space impunctate; antennae stout, longer than the head and prothorax, the medial joints one-half longer than wide, inflated and rounded at the sides and pedunculate at base; prothorax very slightly narrower than the head, not longer than wide, the sides evidently converging from apex to base and nearly straight, the apical angles distinct and not rounded, the punctures not quite as coarse as those of the head, confused and moderately sparse except along the broad impunctate

median area in basal three-fifths, where they are linear; elytra large, parallel, distinctly elongate, a third wider and one-half longer than the prothorax, the punctures similar in size to those of the pronotum but feebler, close-set in rather even unimpressed series throughout; basal angles not rounded; abdomen parallel, narrow, straight at the sides, only three-fourths as wide as the elytra, the fine punctulation not dense; legs slender. Male with the surface of the fifth and sixth segments wholly unmodified, the apex of the fifth rectilinearly truncate, becoming very feebly sinuate in the median third or fourth, the sixth narrow, broadly rounded at tip, with a deep sinus about a third as wide as the apex, apparently rather deeper than wide and parabolic in form; female not known. Length 4.6 mm.; width 0.75 mm. Texas.
texana n. sp.

I have seen but a single specimen of this very delicate species and it is from an unrecorded part of the state.

Lathrobioma n. gen.

The species of this genus in their dense integuments, general form of the body, large head, and, especially, in their thick submoniliform antennae, greatly resemble *Lathrobium*, but the formation of the posterior tarsus prohibits any such association, the tarsi being shorter and more compact, with the four basal joints subequal and mutually similar, each having in general two long oblique setae projecting anteriorly from the anterior margin beneath, the fourth joint sometimes a little smaller, the first about as long as the second and not elongate, not obliquely produced beneath the base of the second and without trace of the expanded sole characterizing *Lathrobium*; the fifth joint is frequently nearly as long as the first four combined. The species are smaller than those of *Lathrobium*, comprising some of the more minute of the Lathrobia, have smaller eyes and are more slender as a rule. They extend over the same geographical range in America, to which region they may possibly be confined, and are moderately numerous, those represented in my cabinet being distinguishable as follows : —

Elytra larger, as long as the prothorax or longer and notably wider, the body broader and less convex; elytral punctures more or less irregularly lineate in arrangement.. 2

Elytra small, never much wider and always distinctly shorter than the prothorax, the body more slender and rather more convex 6

2 — Head as wide as the elytra — probably in both sexes 3

Head much narrower than the elytra in the female, possibly less obviously so in the male 4

3 — Body rather stout, parallel, shining, black throughout, the sutural margin and line of the apex rufescent; legs and antennae dark testaceous; head large, sparsely punctured, much wider at base than across the eyes, the sides straight, the angles narrowly rounded; neck barely half as wide; antennae thick, not quite as long as the head and prothorax, joints two and three equal, about one-half longer than wide, the fourth a little shorter, the outer joints not longer than wide, rounded; prothorax three-fourths as wide as the head, distinctly elongate, subparallel, the sides just visibly converging, the angles rather distinct and but little rounded, the punctures larger than those of the head, coarse and only moderately sparse; elytra fully a fourth wider and a fifth longer than the prothorax, parallel, distinctly longer than wide, the punctures coarse, moderately sparse and only very obscurely and partially sublineate; abdomen distinctly narrower than the elytra, parallel and straight at the sides, finely, not closely punctulate, shining; legs moderately slender, the hind tarsi there-fourths as long as the tibiae. Male unknown; female with the sixth ventral broadly, evenly rounded, scarcely lobed. Length 5.8 mm.; width 0.97 mm. Virginia (Grafton).
virginica n. sp.

Body more slender, parallel, deep polished black throughout, the legs piceous-black, the antennae fuscous; head narrower and more oval, parallel and broadly arcuate at the sides, the basal angles rather broadly rounded, the neck rather more than half as wide, the eyes moderately developed, at about three times their own length from the base; punctures moderately coarse, deep and sparse; antennae thick, nearly as in *virginica;* prothorax four-fifths as wide as the head, distinctly elongate, subparallel, the sides nearly straight, the punctures but little larger than those of the head, rather feeble and very sparse, deeper and more closely aggregated along the median smooth line but not lineate; elytra rather finely, sparsely punctate, longer than wide, parallel, about a fifth wider than the prothorax but not quite as long in the male, probably fully as long in the female; abdomen parallel, straight at the sides, nearly as wide as the elytra, convex, finely, sparsely punctulate. Male with the fifth ventral moderately impressed and subglabrous in the middle, except toward base, the apical margin very feebly and gradually sinuate in the middle; sixth with a declivous parallel polished impunctate and deep excavation in median fourth or more, beginning near the base, the apex with a quadrate emargination as wide as the impression, the sides of which are parallel and formed in part by dentiform prolongations of the sides of the excavation, the bottom transversely sinuate; female unknown. Length 5.9 mm.; width 0.85 mm. Oregon.
shoshonica n. sp.

4 — Elytra equal in length to the prothorax; species very small in size. Body moderately stout, subparallel, deep black throughout, the legs and antennae piceo-rufous; head quadrate, as long as wide, parallel and

straight at the sides, the angles rather narrowly rounded, the eyes moderately small and rather convex; punctures coarse and only moderately sparse; antennae thick, distinctly shorter than the head and prothorax, gradually thicker distally, the outer joints not quite as long as wide; prothorax subparallel, distinctly longer than wide, obviously narrower than the head, the punctures coarse, deep, moderately sparse and evenly, though irregularly, distributed; elytra subparallel, longer than wide, a fourth wider than the prothorax, the punctures fine, sparse and sublineate; abdomen slightly narrower than the elytra, parallel, minutely and rather closely punctulate. Male not at hand; female broadly rounded and feebly lobed at tip of the sixth ventral. Length 4.1 mm.; width 0.75 mm. Massachusets (Lowell), — Mr. F. Blanchard. **nanula** n. sp.

Elytra much longer and wider than the prothorax....... 5

5 — Form rather stout and only moderately convex, pale brownish-flavate in the body and legs, the head, antennae, and, to a less extent, the prothorax, slightly infuscate — the type probably somewhat immature; surface shining; head rather longer than wide, parallel and nearly straight at the sides, the angles rather broadly rounded, the neck more than half as wide; punctures moderately coarse and rather sparse; antennae thick but not enlarged distally, obviously shorter than the head and prothorax, the outer joints shorter than wide; prothorax about a fifth longer than wide, only very slightly narrower than the head, the sides distinctly converging; punctures only moderately coarse, equal to those of the head but sparser; elytra unusually large, parallel, longer than wide, a third wider and a fourth longer than the prothorax, the somewhat coarse punctures arranged in nearly even series; abdomen distinctly narrower than the elytra, straight and parallel at the sides, rather closely, finely punctulate; legs moderately stout, the hind tarsi scarcely three-fourths as long as the tibiae. Male unknown, the sixth ventral of the female evenly and broadly rounded behind. Length 5.5 mm.; width 0.9 mm. Dakota (Bismarck)............**dakotana** n. sp.

Form similar but rather less stout, deep shining black throughout, the legs and antennae piceous-black; head narrower and more elongate, parallel and straight at the sides, the angles broadly rounded; eyes at between three and four times their own length from the base; antennae thick, much shorter than the head and prothorax, the outer joints wider than long; prothorax much narrower, distinctly narrower than the head and longer than wide, subparallel, the punctures moderately coarse, deep and sparse; elytra longer than wide, parallel, two-fifths wider and nearly a third longer than the prothorax, the punctures moderately fine and sparse and less distinctly serial than in *dakotana;* abdomen almost as wide as the elytra, straight at the sides, finely and rather closely punctulate; legs moderately stout. Male unknown; female with the sixth ventral convex, broadly rounded at tip. Length 5.4 mm.; width 0.85 mm. British Columbia..................................**hespera** n. sp.

6 — Head parallel at the sides in both sexes.......................... 7

Head broadest near the base, at least in the male, sometimes parallel in the female... 8

7 — Body slender, convex, parallel, deep shining black throughout, the legs

ferruginous; antennae dusky; head oblong, slightly elongate, the sides very feebly arcuate; angles moderately broadly rounded; neck much more than half as wide, the punctures moderately coarse and sparse; antennae moderately stout, not enlarged distally, not as long as the head and prothorax, the outer joints nearly as long as wide; prothorax nearly a fourth longer than wide, rather narrow, much narrower than the head, subparallel, the punctures coarse and not very sparse; elytra slightly wider than the prothorax and but little shorter, not quite as wide as the head, slightly longer than wide, the sides very feebly diverging, the punctures rather small and sparse but distinct, subserial; abdomen at base as wide as the elytra, a little wider at the apex of the fourth segment, shining, minutely and not densely punctate. Male with the fifth ventral feebly impressed in the middle toward tip, the apex transverse and unmodified, the sixth with a deep, slightly diverging excavation in rather more than median fourth, beginning near the base, the bottom polished and rapidly declivous to the emargination, which is somewhat wider than deep, the lateral projections, partially forming the latter, obtuse and bearing each a small fringe of spiculiform hairs; female with the elytra fully as long as the prothorax and distinctly wider, the sixth ventral obtusely rounded. Length 4 8–5.8 mm.; width 0.78 mm. Massachusetts (Lowell), Rhode Island (Boston Neck), New Jersey and Iowa..**othioides** Lec.

8 — Elytra only slightly shorter than the prothorax; body deep shining black in color throughout.. 9

Elytra very much shorter than the prothorax in both sexes; body blackish-piceous to paler in color when mature.............. 11

9 — Processes of the sixth ventral in the male diverging posteriorly. Body very slender, parallel, the tip of the abdomen feebly rufescent; legs rather bright rufous, the antennae somewhat dusky; head rather longer than wide and distinctly wider than the elytra, only slightly broader toward base, the sides feebly arcuate, the angles broadly rounded; punctures moderately coarse and sparse; eyes notably small, the antennae thick, slightly enlarged distally; prothorax much elongated, parallel, distinctly narrower than the head, fully a fourth longer than wide, the punctures somewhat coarse, uneven in distribution, rather more densely aggregated along the median smooth line; elytra in the male but little longer than wide, just visibly wider than the prothorax and about four-fifths as long, in the female distinctly wider than the prothorax, very nearly as long and fully as wide as the head; punctures moderately fine and sparse but distinct and scarcely lineate; abdomen parallel, not quite as wide as the elytra, shining, the fine sculpture not dense. Male with the fifth ventral feebly impressed in the middle in apical half, the apex transverse, the sixth with the usual narrow deep excavation not extending to the base, more broadly expanding posteriorly than in the preceding species, the processes more angulate and separated at tip by nearly half the width of the segment, the emargination much wider than deep, the bottom evenly rounded; declivous floor of the excavation broadly thinner and translucent posteriorly. Length 5.0 mm.; width 0.7 mm. Rhode Island (Boston Neck)....................**tenuis** Lec.

Processes of the sixth ventral in the male inflexed toward tip; legs and antennae darker, piceo-rufous in color..............................10

10 — Body smaller and more slender; head but little longer than wide, the sides nearly straight and distinctly diverging posteriorly from the moderately small eyes to the basal angles, which are not very broadly rounded; punctures sparse, not very coarse; antennae short and very stout, much shorter than the head and prothorax, slightly enlarged distally, the outer joints wider than long; prothorax about a fifth longer than wide, very slightly narrower than the head, the sides slightly converging, the punctures moderately coarse and sparse; elytra in the male fully as wide as the head, much wider than the prothorax and very nearly as long, subparallel and a little longer than wide; in the female proportioned almost similarly but relatively more elongate in form; punctures rather small and sparse; abdomen subparallel, not quite as wide as the elytra. Male with a narrow deep subglabrous impression at the middle of the fifth ventral in more than apical half, the apex very feebly sinuato-truncate; sixth with the usual deep parallel excavation with declivous glabrous floor, the apical emargination deep, parallel, circularly rounded at the bottom, the processes forming part of its sides acute and slightly flexed toward each other; female slightly more slender than the male. Length 5.0 mm.; width 0.7 mm. Manitoba (Winnipeg)....................................**nigrolinea** n. sp.

Body larger and rather stouter in form, parallel; head larger but only very slightly enlarged posteriorly, the sides more or less distinctly arcuate and the basal angles more broadly rounded; punctures moderately coarse and rather close-set; antennae moderately stout, not sensibly enlarged distally; prothorax nearly as in *nigrolinea* but broader and less elongate, distinctly narrower than the head, strongly, moderately sparsely punctured; elytra finely, sparsely, sublinearly punctate in the male, distinctly longer than wide, parallel, slightly wider and a little shorter than the prothorax, not as wide as the head; in the female similar but very slightly more elongate and only just visibly shorter than the prothorax; abdomen parallel, not quite as wide as the elytra, minutely, not closely punctulate. Male with secondary sexual characters nearly as in the preceding species, the excavation of the sixth ventral not extending quite so far toward the base of the segment; female nearly similar to the male but with the head a little smaller and not wider than the elytra. Length 6.0 mm.; width 0.88 mm. Oregon (Portland), — Mr. H. F. Wickham.......**oregona** n. sp.

11 — Body moderately slender, shining, dark rufo-piceous, the abdomen black, becoming rufescent at tip, the legs ferruginous; antennae dusky; head longer than wide, obviously wider than the elytra in both sexes, very slightly wider toward base, the sides feebly arcuate and the angles broadly rounded, eyes moderate; antennae very stout, slightly enlarged distally; punctures strong, moderately sparse; prothorax very slightly narrower than the head, not quite a fourth longer than wide, the sides only just perceptibly converging, the punctures strong, coarse and somewhat closer than usual; elytra in the male parallel, slightly longer than wide, equal in width to the prothorax and scarcely more than three-fourths as long, the surface rather more uneven than usual,

sparsely, not very coarsely punctate; in the female quadrate, distinctly wider than the prothorax though much shorter; abdomen nearly as wide as the elytra, minutely and more closely punctured than usual. Male with the fifth ventral rather narrowly and feebly impressed along the middle, the impression beginning near the base and extending, slightly broadening, to the apex, the latter rectilinearly truncate; sixth ventral with a large oval shallow and clearly limited impression, clothed with sparse spiculiform hairs and extending from near the base to the apex, where there is a small emargination, slightly wider than deep, narrower than the impression — which is a third as wide as the segment — and enclosed between very short projecting processes. Length 5.5 mm.; width 0.82 mm. Massachusetts (Lowell), — Mr. F. Blanchard..**scolopacea** n. sp.

Body nearly similar to the preceding but a little larger and more slender, pale brownish-testaceous throughout, the abdomen blackish except toward tip; antennae dusky; head suboval, slightly wider than the elytra in the male, equal thereto in the female, very feebly enlarged toward base in the male, parallel in the female, the sides very feebly arcuate; basal angles less rounded than in *scolopacea*; antennae nearly similar; punctures rather sparser; prothorax narrower and more elongate, distinctly narrower than the head in both sexes, less strongly punctured; elytra similar in the sexes, barely as long as wide, with the sides obviously diverging, very slightly wider and much shorter than the prothorax, feebly and sparsely punctate; abdomen subparallel, a little narrower than the elytra, minutely, not very closely punctulate. Male with the fifth ventral broadly, feebly impressed in more than median fourth from a little before the middle to the apex, the latter truncate; sixth with a shallow oval impression and apical emargination nearly as in *scolopacea*. Length 5.8 mm.; width, 0.78 mm. Lake Superior..**inops** Csy.

It will be observed that the secondary sexual characters of the male remain virtually constant in type throughout and constitute as valid a generic character as any other structural modification. These characters are modified to some extent, as a matter of course, giving such forms as described under *othioides*, *nigrolinea* and *scolopacea*. The form of the modification of the sixth ventral in the *nigrolinea* group, reminds us of the form assumed in certain Scopaei, notably *Scopaeoma*. *Inops* was united with *othioides* some years ago, as a synonym of that species, but there is no close resemblance between them.

Lathrolepta n. gen.

This genus is well distinguished from any of the preceding by the form of the gular sutures, the narrow, deep, acutely angulate notch of the labrum, dividing the latter into two quadrate lobes and the less strongly dilated anterior tarsi. It differs from *Lathrobium* and allied genera, also in the form of the hind tarsi, which have the four basal joints small and subequal. It is represented at present by a single very small species, having the general facies of *Lathrobioma*, and of wide distribution, which may be readily recognized by the following characters: —

Parallel, slender, convex, shining, dark piceous or blackish in color, the legs and antennae fusco-testaceous, the abdomen darker than the anterior parts; head as wide as the elytra, parallel at the sides, the angles somewhat narrowly rounded, the punctures rather strong and sparse; antennae thick, scarcely as long as the head and prothorax, submoniliform, distinctly incrassate distally, with the outer joints a little wider than long; prothorax narrow and elongate, parallel, distinctly narrower than the head and still more coarsely and strongly punctate, the punctures not very sparse and not serial; elytra short, scarcely as long as wide, much shorter than the prothorax, at base a little wider than the latter, at apex more obviously wider, the sides diverging from the base; punctures smaller, sparse and rather confused; abdomen at base as wide as the elytra, slightly wider behind, finely, not densely punctate; legs moderately stout. Male with the third and fourth ventrals narrowly and feebly impressed along the middle, the fifth more widely and strongly impressed throughout in median fifth or sixth, the apex broadly sinuato-truncate, the sixth not obviously impressed, though broadly, indefinitely so toward base, but with a large discal patch of short black spicular hairs at each side of the median line, the apex broadly subtruncate, with a gradually formed, broadly rounded, shallow median sinus, about a third as wide as the segment and five times as wide as deep; female somewhat stouter than the male, the sixth ventral with a broad feeble and broadly rounded lobe at tip, unimpressed. Length 3.3 mm.; width 0.5 mm. New York (near the city), Massachusetts (Lowell) and Iowa; Michigan, — LeConte..**debilis** Lec.

The type is one of the smallest known species of the Lathrobia; it does not seem to be rare and varies considerably in shade of color, possibly due to immaturity. It will be noticed that the female is stouter than the male — and not more slender, as is evidently the case with many of our larger Lathrobia.

Tetartopeus Czwl.

We arrive here at a succession of forms, the chief distinguishing character of which is the narrow neck — similar to that of *Domene*. They are of more or less robust form, of small to moderately large size and are gradually pointed anteriorly, being widest at the elytra, with the prothorax and head decreasing in width, giving them a somewhat fusiform outline. The maxillary palpi are long and notably slender in the present genus, the fourth joint being unusually slender and aciculate, the antennae more or less long, slender and filiform, with the hind tarsi as in *Lathrobium*. The elytra are always larger and more closely punctate than in that genus, without trace of linear arrangement. The slender neck is undoubtedly a most significant and conclusive generic character and *Tetartopeus* should in no wise be considered a subgenus of *Lathrobium*. The species are rather numerous and very widely distributed over the holarctic regions of the earth, extending as far south in North America as Florida and Texas, but most abundant in the colder sections of the northern continents. Those represented by material in my cabinet may be readily known as follows: —

Elytra at least as long as the prothorax, and, in all but very rare cases, decidedly longer.. 2
Elytra shorter than the prothorax, the body more parallel................16
2 — Elytra red or piceous, sometimes clouded with blackish toward base or near the suture, never abruptly paler at apex or at the external apical angles.. 3
Elytra black or blackish, with the external apical angles more or less abruptly pale, the pale tint sometimes extending across the apex.... 9
Elytra intense black throughout; the entire body black, the legs dark.... 14
3 — Prothorax deep black.. 4
Prothorax pale testaceous, similar in color to the elytra................ 8
4 — Head parallel or only very feebly and gradually narrowed behind the eyes and then only in the female.................................. 5
Head very obviously narrowed behind the eyes in both sexes............ 7
5 — Prothorax not very coarsely and unusually sparsely punctate. Body moderately stout and convex, polished black, the elytra dark piceorufous; head parallel at the sides behind the eyes, the base semicircularly rounded; eyes at three-fourths more than their own length from the base, measured on the median line as usual; antennae scarcely as long as the head and prothorax and rather thicker than usual, the medial joints about two-thirds longer than wide; prothorax very much wider than the head, oblong, broad, only slightly longer than wide, highly polished, very sparsely and somewhat inconspicuously punctured; elytra quadrate, parallel, a third wider and about a fourth longer than the prothorax, fully as long as wide, the punctures rather close-set

and unusually coarse and deep; legs moderately long, not very stout. Male with ventrals two to four feebly impressed along the middle, the impression of the fifth subobsolete; sixth broadly arcuato-truncate at tip, with a very small deep and acutely angulate notch, deeper than wide and not more than a tenth or twelfth as wide as the apex, partially concealed by the pubescence as usual; disk not distinctly modified. Length 6.8 mm.; width 1.25 mm. Montana (Kalispell), — Mr. Wickham ....**captiosus** n. sp.

Prothorax strongly and more coarsely punctate, the punctures more or less close-set..6

6 — Antennae of the male very slender, rather longer than the head and prothorax, with the medial joints rather more than twice as long as wide, shorter and relatively thicker in the female, with the medial joints distinctly less than twice as long as wide. Body rather stout, the head semicircularly rounded, the eyes well developed, the surface more finely and closely punctured than in *captiosus*, a little narrower in the female than in the male and with the sides feebly converging behind the eyes; prothorax oblong, broad, only slightly longer than wide, much wider than the head, the median impunctate line narrow; elytra in the male quadrate, a third wider and a fifth longer than the prothorax; in the female slightly longer than wide, two-fifths wider and more than a fourth longer than the prothorax; punctures close-set and only moderately coarse, similar in size to those of the pronotum. Male with ventrals two to five subequally and feebly impressed along the middle, the sixth with a small deep and acutely angular notch as in the preceding species; female with the sixth ventral greatly produced in an obtusely rounded lobe, unimpressed, the body smaller and less stout than in the male. Length 6.0–7.0 mm.; width 1.2–1.26 mm. Massachusetts, Canada, New York, New Jersey, Iowa and North Dakota (Devil's Lake)..**punctulatus** Lec.

Antennae of the male thicker, longer than the head and prothorax but with the medial joints somewhat less than twice as long as wide; in the female still thicker, barely as long as the head and prothorax, with the medial joints about one-half longer than wide. Body resembling *punctulatus* throughout in color and sculpture, but a little stouter, with slightly smaller eyes, and with the male and female similar in form and very nearly so in size, the head in the female being somewhat narrower but not noticeably narrowed behind the eyes. Male with the second and third ventrals unimpressed, the fourth and fifth rather broadly and very feebly impressed along the middle, the sixth with a very small triangular notch, deeper than wide, nearly as in the preceding species but a little less deep and rather broader at the opening, the surface with the pubescence denser in the region of the notch as usual. Length 7.0 mm.; width 1.3 mm. Idaho (Priest River), — Mr. Wickham.
hebes n. sp.

7 — Body smaller in size than the preceding and obviously more slender, black, with the elytra bright rufous; head small, longer than wide, finely, not densely punctate, the sides converging for some distance behind the the eyes, then circularly rounded at base; eyes well developed, the antennae somewhat longer than the head and prothorax, moderately slender, the medial joints fully twice as long as wide; prothorax

rather narrow, parallel and elongate, much wider than the head, moderately closely and coarsely punctured; elytra parallel, slightly elongate, two-fifths wider and one-fifth longer than the prothorax in the male, the punctures rather small but strong and close-set. Male with the second ventral unmodified, the third narrowly and moderately impressed along the middle, more strongly behind; fourth narrowly and rather strongly impressed throughout, the fifth also strongly and less narrowly, the impression transversely divided in the middle; sixth with a broad and shallow cuspidiform emargination, much wider than deep, the apical lobes very broadly rounded, the surface densely pubescent in the region of the emargination; female differing but little from the male, the antennae slightly thicker but equally elongate, the prothorax relatively shorter. Length 6.0 mm.; width 1.05 mm. Massachusetts to Iowa.................................**rubripennis** n. sp. (Fvl. MS.)

Body somewhat similar to the preceding in size and form, the prothorax notably larger and broader; elytra pale piceo-rufous in color; head slightly broader, finely, not densely punctate, the eyes well developed; antennae still longer, equally slender, longer than the head and prothorax, the medial joints somewhat more than twice as long as wide in the male; prothorax broad, but slightly longer than wide, very much wider than the head, parallel, the sides feebly arcuate, the angles broadly rounded; punctures not very coarse and moderately close-set; elytra slightly longer than wide, parallel, about a third wider and more than a fourth longer than the prothorax; punctures rather coarse and close-set. Male with the third ventral not distinctly impressed, the fourth narrowly and rather strongly so along the middle, the fifth less narrowly, deeply and subovally so throughout the length, the impression faintly divided transversely at the middle; sixth with a narrow very deep angular notch, much larger in size than that of *punctulatus* and allies, fully twice as deep as wide, with its opening an eighth or ninth as wide as the segmental apex, the notch rendered obscure to low amplification by reason of the dense obtruding pubescence; female unknown. Length 6.7 mm.; width 1.2 mm. Indiana? Cab. Levette.
callidus n. sp.

8 — Form narrower and more parallel than usual, black, the prothorax and elytra rufous, the latter clouded with blackish toward suture and base; head orbicular, rather longer than wide, finely, very sparsely punctate, closely so at the sides, the eyes moderate; antennae long and very slender, much longer than the head and prothorax, the medial joints distinctly more than twice as long as wide; prothorax oblong, distinctly wider than the head, a fifth or sixth longer than wide, the punctures rather coarse and uneven, not very close-set; elytra quadrate, a fourth wider but only very slightly longer than the prothorax, rather coarsely unevenly and moderately closely punctate. Male with the fourth and fifth ventrals narrowly and just visibly flattened along the middle, not impressed, the sixth with a very minute sharply angulate median notch, much deeper than wide and narrower than in *punctulatus*, almost concealed by the dense vestiture clothing the surface toward the notch; female unknown. Length 7.5 mm.; width 1.15 mm. Iowa.
semiruber n. sp.

9 — Head not distinctly narrowed behind the eyes in the male; antennae long, more or less slender, much longer than the head and prothorax.10

Head obviously narrowed gradually from the eyes to the rounded base; legs pale; antennae infuscate, paler toward base and apex................12

10 — Small species, unusually slender in form, dark piceous in color, the head and abdomen black, the elytral apex narrowly, more broadly externally, and legs, very pale; antennae fuscous, pale toward base and apex; head a little longer than wide, the sides subparallel and feebly arcuate for a long distance behind the eyes, the base broadly, subcircularly rounded; eyes moderate, at fully twice their own length from the base; punctures fine and rather sparse laterally, broadly wanting in the middle; antennae long and slender, nearly half as long as the body, the medial joints twice as long as wide; prothorax distinctly elongate, parallel and feebly arcuate at the sides, the angles broadly rounded, just visibly wider than the head, rather coarsely but feebly and somewhat sparsely punctate, the median impunctate line unusually wide; elytra well developed, parallel, slightly elongate, one-half wider and a fourth longer than the prothorax, rather finely feebly and sparsely punctate; abdomen distinctly narrower than the elytra, densely punctulate and dull as usual. Male unknown; female with the sixth ventral obtusely rounded at tip, unimpressed. Length 4.5 mm.; width 0.78 mm. Florida (Capron) ....**floridanus** n. sp.

Species larger in size and stouter, not less than 6 mm. in length.........11

11— Antennae in the male longer, the medial joints nearly two and one-half times as as long as wide. Body rather stout, deep black throughout, the external apical angles of the elytra abruptly and clearly pale flavo-testaceous; legs very pale; antennae blackish, except the pale first and eleventh joints; head rather well developed, not much longer than wide, subparallel and feebly arcuate for about one length behind the eyes, the base thence semicircular or feebly subtruncate toward the middle; punctures minute and rather close-set, wanting at the middle of the vertex; eyes well developed; antennae longer than the head and prothorax, moderately slender; prothorax large and broad, only very slightly longer than wide, not very coarsely but strongly, rather sparsely punctate, much wider than the head, the sides broadly arcuate, the median smooth line rather ill-defined at the sides; elytra quadrate, not at all longer than wide, parallel, a third wider but only just visibly longer than the prothorax in the male, a little longer than wide and distinctly longer than the prothorax in the female, the punctures small, rather sparse and feeble; abdomen but little narrower than the elytra. Male with the second ventral slightly flattened, the third and fourth rather broadly and very feebly impressed along the middle, the fifth rather less broadly but less feebly impressed, the apex feebly sinuate at the middle; sixth with a small, acutely triangular notch, deeper than wide, about an eighth or ninth as wide as the apex, the surface somewhat elevated gradually — and more pubescent — toward the notch, not impressed, the apex truncate; female nearly as large but less stout throughout than the male, the sixth ventral with a narrowly rounded produced apical lobe. Length 7.0-7.7 mm.; width 1.2-1.25 mm. Massachusetts (Lowell) and Rhode Island...........................**angularis** Lec.

Antennae in the male less elongate, about equally slender, the medial joints not quite twice as long as wide. Body less stout, black, the elytra slightly piceous, the pale spot at the outer angles broader and rather less abruptly defined; legs very pale, the antennae fuscous; head nearly as in the preceding species but smaller and narrower, less finely punctate and more evenly semicircular at the base; antennae scarcely longer than the head and prothorax, the latter narrower and more distinctly elongate, much wider than the head, the sides parallel and distinctly arcuate, the punctures equally strong and coarse and rather less sparse; elytra slightly elongate, parallel, similarly, though less sparsely, punctate, two-fifths wider and a fourth longer than the prothorax; abdomen but little narrower than the elytra. Male with the second and third ventrals unmodified, the fourth very feebly impressed toward apex only, the fifth equally feebly impressed throughout the length, the apex feebly sinuate at the middle, the sixth with a very narrow and acutely angulate notch, much deeper than wide, not more than a twelfth as wide as the apex, the latter inwardly and anteriorly oblique and truncate at each side of the notch and not transverse as in *angularis,* the surface as in that species; female nearly similar to the male, except that the sides of the head are obviously converging behind the eyes. Length 6.4 mm.; width 1.15 mm. Massachusetts (locality unknown).
furvulus n. sp.

12 — Median smooth line of the pronotum normally wide and distinct. Body rather small in size and of less stout form, deep black, the prothorax and elytra with a scarcely discernible piceous tinge, the outer angles of the latter pale; head rather finely and sparsely punctate, the eyes rather smaller and more prominent than in the two following, the sides behind them strongly converging and nearly straight, then broadly, circularly rounded at the base; prothorax oblong, parallel, rather distinctly elongate, with the sides broadly arcuate, only very slightly wider than the head, the punctures notably coarse, deep and moderately sparse; elytra slightly elongate, parallel, a third wider and a fifth longer than the prothorax, less coarsely but rather strongly and about equally sparsely punctate, somewhat rugose by oblique reflection as usual; abdomen as wide as the elytra. Male not known; female with the sixth ventral briefly lobed, the lobe arcuately truncate at tip; surface not at all impressed. Length 6.0 mm.; width 1.0 mm. Pennsylvania (near Philadelphia).................................**nigrescens** n. sp.

Median smooth line of the pronotum narrow and generally subeffaced; species larger and stouter, black, sometimes with a feebly piceous tinge...13

13 — Body moderately stout, the pale spot at the outer elytral angles large; head narrow, longer than wide, minutely, rather closely punctate laterally, subimpunctate toward the middle, the sides behind the eyes rapidly converging and nearly straight almost to the base, which is arcuately subtruncate; antennae slender, much longer than the head and prothorax, the medial joints more than twice as long as wide in the male; prothorax moderately broad, distinctly wider than the head and longer than wide, the sides parallel and broadly arcuate, the punctures rather coarse, deep and close-set, gradually becoming fine and sparse

toward the sides as usual; elytra quadrate, a third wider and a fifth longer than the prothorax, the punctures rather fine but distinct and somewhat close-set. Male with sexual characters nearly as in *rubripennis*, the third ventral narrowly and just visibly impressed along the middle, the fourth less narrowly and more strongly, the fifth still more strongly though not deeply, the sixth convex, more densely pubescent as usual toward the middle and apex, the latter very broadly and obtusely bilobed, the lobes separated by a broad shallow and acutely cuspidiform emargination; female not known. Length 6.8 mm.; width 1.2 mm. New York (near the city).................................**agitans** n. sp.

Body nearly similar in form but larger; head longer than wide, finely, rather closely punctate toward the sides, the latter converging and nearly straight for only the length of the large eyes behind them, then broadly arcuate across the base; antennae in the female as long as the head and prothorax, moderately slender, the medial joints fully twice as long as wide; prothorax rather broad, much wider than the head, about a fifth longer than wide, the sides parallel and broadly arcuate, the punctures only moderately coarse but deep and rather close-set; elytra quadrate, fully as long as wide, parallel, about a third wider but only very slightly longer than the prothorax, the punctures fine, rather feeble and closer than usual; abdomen slightly narrower than the elytra. Male unknown; female with a narrow produced and evenly rounded apical lobe of the sixth ventral, the surface with a distinct narrow impression along the median line just behind the middle, extending only to the base of the lobe. Length 7.5 mm.; width 1.25 mm. Texas (Austin).............**tetricus** n. sp.

14 — Head in the female broadly truncate and arcuate at base, subequal in width to the prothorax. Body moderately slender, deep black throughout the body, legs and antennae, the tarsi slightly paler; head broad, barely as long as wide, the sides parallel and nearly straight for the length of the eye behind the latter, then moderately broadly rounded through the basal angles, the base feebly arcuate; eyes moderate, at nearly twice their own length from the base, the punctures very fine; antennae longer than the head and prothorax, the medial joints about two-thirds longer than wide; prothorax rather small and broad, but little longer than wide, just visibly wider than the head, parallel and feebly arcuate at the sides, the punctures moderately coarse, strong and somewhat close-set; elytra parallel, slightly elongate, rather strongly and moderately closely punctate, two-fifths wider and two-fifths longer than the prothorax; abdomen distinctly narrower than the elytra. Male not at hand; female with the sixth ventral broadly rounded and feebly lobed at tip, not impressed. Length 6.0 mm.; width 1.05 mm. Vancouver Island..**finitimus** Lec.

Head in both sexes semicircularly rounded at base, the species smaller and narrower in form..15

15 — Eyes smaller, situated at about twice their own length from the base — measured on the median line. Body rather narrow, intense black throughout, the legs and antennae concolorous, the tarsi piceous-black; head slightly elongate, broadly arcuate from the eyes through the base, becoming nearly parallel for fully the length of the eye be-

hind the latter, finely, rather closely punctured laterally; antennae moderately slender, about as long as the head and prothorax in the female, the medial joints distinctly less than twice as long as wide; prothorax much wider than the head, distinctly elongate, being longer and narrower than in *finitimus,* parallel and almost perfectly straight at the sides, strongly and rather closely punctate; elytra parallel, much elongated, strongly, somewhat closely punctate, about two-fifths longer and wider than the prothorax; abdomen slightly narrower than the elytra. Male unknown; female with the sixth ventral unimpressed, distinctly lobed at tip, the lobe moderately broadly rounded at apex. Length 6.0 mm.; width 0.95 mm. Montana (Kalispell)..**stibium** n. sp.

Eyes larger, well developed, at distinctly less than twice their own length from the base. Head nearly as in *stibium*, the antennae rather distinctly longer than the head and prothorax, moderately slender, the medial joints slightly less than twice as long as wide in the female but very nearly that in the male; prothorax a little broader and less elongate, parallel and sensibly arcuate at the sides, distinctly wider than the head in the female and much wider in the male, strongly, somewhat closely punctured, the smooth median line narrow and sometimes almost obliterated; elytra much broader in both sexes, but little longer than wide, a third wider and a fourth longer than the prothorax in the male, two-fifths wider and a fourth longer in the female, the punctures fine but distinct, moderately close-set; abdomen obviously narrower than the elytra in both sexes; body black throughout, the legs black when mature, with the tarsi slightly paler, the hind tarsi four-fifths as long as the tibiae. Male with ventrals one to four unmodified, the fifth narrowly and rather strongly impressed along the median line throughout; sixth transversely truncate at tip, with a small and very narrow, acutely angulate notch, much deeper than wide and not more than a twelfth or fourteenth as wide as the apex; pubescence not materially denser in the neighborhood of the notch; female with the sixth ventral broadly and obtusely lobed at apex. Length 5.8 mm.; width 1.1 mm. Massachusetts, Michigan and Wisconsin (Bayfield)...............**niger** Lec.

16 — Body parallel, deep black throughout, the legs pale, the antennae infuscate, slightly paler toward base; head small, rather longer than wide, arcuately subtruncate at base, not very finely and somewhat sparsely punctate toward the sides, the latter parallel and slightly arcuate; basal angles broadly rounded; eyes rather smaller than usual, the antennae relatively stout, fully as long as the head and prothorax, the medial joints but little more than one-half longer than wide; prothorax large and greatly developed, unusually convex, very much wider than the head, distinctly elongate, the sides parallel and feebly arcuate; anterior angles moderately rounded, the punctures coarse, deep and unusually sparse, gradually finer laterally as usual, the median smooth line well defined; elytra very slightly wider than the prothorax and about four-fifths as long, not quite as long as wide, depressed, the sides feebly diverging from the basal angles, the surface rugose but polished, rather finely but strongly, sparsely punctured; abdomen about as wide as the elytra, dull as usual. Male with the fourth ventral just visibly, the fifth more distinctly but feebly, impressed along the middle, the

sixth with a small and acutely angulate incisure, much deeper than wide and a ninth or tenth as wide as the apex, the latter at each side inwardly and anteriorly oblique and rectilinearly truncate, with the edge beveled, becoming very thin and translucent, the surface with longer hairs along the margins of the notch; female unknown. Length 4.7 mm.; width 0.82 mm. Canada (Toronto)..........**lacustris** n. sp.

In the third supplement to the Henshaw catalogue it is stated on page 10, that No. 2514 (*niger* Lec.), is a synonym of the European *quadratus* Payk. This must surely be in error for No. 2512 (*punctulatus* Lec.), as specimens of *quadratus* sent me by Mr. Reitter, strongly resemble the latter but bear no likeness at all to *niger; quadratus* is, however, not the same as *punctulatus*, having the male impressions of the venter very much deeper and differing besides in its denser sculpture, smaller eyes, more circularly rounded base of the head and other characters. In this supplement No. 2512 (*punctulatus* Lec.) is said to be the same as the European *terminatus* Grav. I do not have *terminatus* before me at present, but the chances are very greatly against the accuracy of any such identification.

Deratopeus n. gen.

The species of this genus greatly resemble *Tetartopeus*, differing principally in the form of the gular sutures and rather shorter and stouter palpi and tarsi, small size, more slender form and some other structural features. They are few in number at present, those in my cabinet being readily separable by the following characters — taken in both instances from the male: —

Body deep black throughout, the elytra testaceous in apical fifth or sixth, somewhat more broadly toward the sides; legs pale ferruginous, the antennae blackish, slightly paler at tip and notably so toward base; head small, longer than wide, parallel and nearly straight at the sides to the broadly rounded basal angles, the base arcuato-truncate; eyes moderately small; antennae rather thick but filiform, as long as the head and prothorax, the medial joints barely one-half longer than wide, the punctures strong but very sparse; prothorax distinctly elongate, much wider than the head, the sides very feebly converging and nearly straight, the punctures coarse, deep and sparse; elytra quadrate, parallel, a third wider than the prothorax but only very slightly longer, strongly though not very coarsely, moderately sparsely punctate, distinctly impressed along the suture; abdomen parallel, straight at the sides, distinctly narrower than the elytra. Male with the third and fourth ventrals just visibly impressed along the middle; fifth with a very deep elongate-oval, glabrous impression, not attaining the base, the apex feebly sinuate at the middle; sixth not impressed, transversely, rectilinearly truncate at tip, with a small and acutely triangular notch, only slightly deeper than wide and an eighth or ninth as wide as the apex; female not at hand. Length 4.0 mm.; width 0.8 mm. Massachusetts (Lowell), —Mr. F. Blanchard; [Florida — LeConte]....................**nitidulus** Lec.

Body colored as in the preceding, the elytra pale testaceous throughout, except a piceous-black cloud toward the suture and not quite extending to the apex; head nearly as in *nitidulus* throughout, the antennae more slender, with the medial joints fully one-half longer than wide; prothorax but slightly elongate, much wider than the head, a little broader and shorter than in the preceding species, parallel and feebly arcuate at the sides, the strong punctures rather less sparse; elytra small and depressed, not as long as wide, very slightly wider than the prothorax and much shorter, the sides diverging from the base, the punctures rather fine but strong, somewhat sparse; abdomen parallel and straight at the sides, fully as wide as the elytral apex, dull in lustre and densely punctulate as in the preceding species. Male with the third ventral unmodified, the fourth very feebly impressed near the apex only, the fifth with a small and very deep subglabrous pit, rounded in outline, extending from a little before the middle to the apex, the latter feebly sinuato-truncate; sixth with an acutely angulate triangular incisure, deeper than wide, larger and deeper than in *nitidulus* and a seventh or eighth as wide as the apex, the latter anteriorly and outwardly truncate at each side; female not known. Length 4.5 mm.; width 0.75 mm. Massachusetts (Lowell), — Mr. Blanchard..........**parvipennis** n. sp.

The difference in general facies between the large-winged and short-winged species in all these genera of the Lathrobia being so pronounced, with most other characters so similar, has suggested the presence of dimorphism, but I have been unable to prove this in any one instance, and, indeed, the only useful evidence will be that gained by actual observation of the life history of the species. The normal sexual differences in the elytra are not great, although nearly always observable, the elytra of the female being a little larger than those of the male, but, as can be seen in this genus, as well as in *Tetartopeus lacustris*, the presence of short winged forms, if not indicative of specific difference, must be due to perfectly asexual dimorphism, — a matter impossible to prove without careful biological study.

Eulathrobium n. gen.

We begin here a series of genera differing radically from those which precede in having a strong cariniform line on the flanks of the elytra, parallel to and not far from the lower edge. This very important character has been referred to previously by several authors, notably Dr. Sharp, in expounding the Amazonian and Mexican Paederini, but I am not aware that it has been employed hitherto in defining genera. The genera without this line are more boreal in habitat and equally characteristic of the old and new world subarctic faunas, but those possessing the line are more southern in habitat, as a rule, and probably originated in America; only one genus — *Lobrathium* Rey, — is common to the nearctic and palaearctic regions of the globe, and this is more northern in its range than any other, probably crossing from America to Asia by way of Bering Strait. The genus *Eulathrobium* consists at present of a single species, one of the largest and finest of our Lathrobia; it may be described as follows:—

Form broad, parallel and somewhat feebly convex, deep black throughout the legs dark brownish-rufous, the antennae and palpi black, with the joints rufous at base; lustre shining; head well developed, wider than long, broadly arcuato-truncate at base, the angles very broadly rounded, the sides becoming parallel and broadly arcuate behind the eyes, which are moderately large, the punctures rather coarse and close-set throughout, excepting a small smooth area on the vertex; antennae filiform, moderately stout, about as long as the head and prothorax, the medial joints three-fourths longer than wide, obconic, a little shorter in the female; prothorax not quite as wide as the head and only very slightly longer than wide, broadly suboval, the sides feebly converging and arcuate posteriorly from the very broadly rounded and obsolete apical angles, the punctures coarse, deep and not very sparse, the median smooth line distinct, narrow, not defined by series; elytra large, quadrate, parallel, distinctly wider than the head especially in the female, about a third wider than the prothorax and a fourth longer in the male, nearly a third longer than the prothorax in the female, the punctures moderately coarse, strong, unusually close-set and arranged without trace of order, the surface shining; abdomen parallel and straight at the sides, but little narrower than the elytra, finely, rather closely punctured but somewhat shining; legs rather long, only moderately stout. Male with the fifth ventral somewhat broadly and feebly flattened along the middle throughout, the apex truncate; sixth unimpressed, the apex broadly sinuato-truncate, with a small, broadly triangular tooth projecting from the middle; female as large as the male but rather less stout, the sixth ventral with a very short arcuato-truncate lobe at tip, the surface not at all impressed. Length 11.0 mm.; width 1.8 mm. Rhode Island (Boston Neck), New Jersey, Pennsylvania and Michigan (Port Huron).......................................**grande** Lec.

This species is not the longest but is by far the stoutest Lathrobiid known to me; it has rather an extended range and is not rare.

Lathrotropis n. gen.

This genus is probably peculiar to the true Pacific coast fauna, representing there the eastern *Eulathrobium*, the species resembling *grande* in their broadly rounded angles of the head and prothorax and close-set coarse punctures, but differing in their smaller size and much more slender and generally more convex form; they also have the basal joint of the hind tarsi longer, although distinctly shorter than the second, and the antennae stouter. The species are moderately numerous and generally abundant in individuals, those before me being characterized as follows: —

Head moderate in size, always narrower than the elytra; elytral punctures usually irregular in arrangement.. 2

Head large, equal in width to the elytra or wider; species smaller in size, the elytral punctures always serial in arrangement.................. 5

2 — Head extremely densely, moderately coarsely punctured and dull. Body large in size, rather stout, parallel, very dark rufo-piceous in color throughout, the antennae fuscous, the legs paler, rufous; head but little longer than wide, slightly narrower than the elytra, more distinctly in the female, the sides parallel and straight for some distance behind the eyes, which are moderate in size, rather convex and prominent and between two and three times their own length from the base; angles very broadly rounded, the base arcuato-truncate; antennae very stout, nearly as long as the head and prothorax, gradually incrassate distally, the medial joints about one-half longer than wide in the male; prothorax elongate-oval, much narrower than the head, moderately coarsely, somewhat closely punctured, the median smooth line distinct but not more elevated and not defined by punctured series; elytra longer than wide, parallel, about a third wider and a fourth longer than the prothorax, coarsely, deeply and very closely punctate, the punctures without trace of serial order; abdomen parallel, distinctly narrower than the elytra, the segments strongly impressed at base, finely, closely punctate and but feebly shining. Male with a small feeble rounded impression at

the apex of the fifth ventral, the apex broadly and feebly sinuato-truncate; sixth segment with a large triangular emargination at tip, generally not quite a third as wide as the apex and nearly as deep as wide, the surface narrowly elevated along the median line toward the notch, the ridge clothed with short stiff black spicules, some of the latter also present at the apices of the segment at each side of the notch; female with the sixth ventral not lobed, broadly rounded at tip and unimpressed. Length 8.0–9.0 mm.; width 1.1–1.3 mm. California (Sta. Clara to Humboldt). [= *lecontei* Duviv.].............**puncticeps** Lec.

Head less densely punctate, the interspaces always shining, the surface not dull in lustre.. 3

3 — Head densely dull beneath, the micro-reticulation very strong. Body smaller, rather stout, parallel, colored as in *puncticeps;* head well developed, not very greatly though distinctly narrower than the elytra, somewhat swollen toward base, the sides straight for some distance behind the moderately small and rather prominent eyes, the angles very broadly rounded, the base broadly rounded and feebly subtruncate, the punctures coarse and rather close-set; antennae very stout, not as long as the head and prothorax, the medial joints about a fourth longer than wide; prothorax rather small, elongate-oval, much narrower than the head, rather coarsely and closely punctate, the smooth median line wide and distinct; elytra parallel, slightly elongate, two-fifths wider and a third longer than the prothorax, coarsely closely and irregularly punctate; abdomen parallel, distinctly narrower than the elytra, finely, rather densely punctulate and somewhat dull. Male with a small and very faint oval impression at the apex of the fifth ventral, the sixth with a broadly parabolic, shallow, gradually formed apical sinus, about a third as wide as the segment, and six times as wide as deep, the surface adjoining extremely feebly impressed, the impression having a small patch of black spicules anteriorly; female unknown. Length 7.2 mm.; width 1.15 mm. California, (Sta. Ana Cañon), — Mr. Wickham......**relicta** n. sp.

Head shining beneath, the micro-reticulation feeble....................... 4

4 — Elytral punctures confused in arrangement, except toward base, where they become unevenly serial. Body moderately stout, piceous-black, the elytra dark rufous, the abdomen deep black; legs ferruginous, the antennae dusky; head but little longer than wide, the sides parallel and straight for a short distance behind the eyes, the angles very broadly rounded thence to the neck, the punctures coarse, deep, separated by more than their own diameters, the vertex impunctate in the middle; antennae stout, the medial joints much longer than the subapical; prothorax elongate-oval, much narrower than the head, coarsely, rather sparsely punctate; elytra distinctly elongate, parallel, coarsely and rather closely punctate, about two-fifths wider and a fourth longer than the prothorax; abdomen finely, closely punctulate, narrower than the elytra. Male with a small unimpressed glabrous area at the middle at apex of the fifth ventral, the sixth with a triangular impression, the apex broadly, parabolically sinuate; female with the sixth ventral obtusely rounded at tip, not lobed or impressed. Length 6.3–8.5 mm.; width 1.0–1.35 mm. California (San Diego to Humboldt) and Nevada (Reno).. **jacobina** Lec.

Elytral punctures distinctly, though somewhat unevenly, serial in arrangement throughout. Body similar in form and coloration to the preceding but smaller in size and more coarsely and closely sculptured; head well developed, parallel at the sides, the angles very broadly rounded to the neck; eyes unusually small, at more than three times their own length from the base; punctures very coarse and close-set, becoming somewhat sparser on the vertex; antennae less stout than usual, very feebly incrassate distally, the medial joints equal in length to the subapical; prothorax narrow and strongly elongate-oval, much narrower than the head, coarsely and rather closely punctured; elytra much elongated, parallel, two-fifths wider and a third longer than the prothorax, very coarsely but not so closely punctate; abdomen slightly narrower than the elytra, less finely and rather closely punctate, somewhat shining. Male with a small oval glabrous pit on the median line at apex of the fifth ventral, the sixth with a small shallow, broadly rounded sinus at apex, the adjoining surface very feebly, triangularly impressed and with short black spiculiform hairs as in the preceding species; female with the sixth ventral very broadly, obtusely rounded at tip. Length 6.7–7.5 mm.; width 1.05 mm. California (Hoopa Valley, — Humboldt Co.)................................**gnoma** n. sp.

5 — Head equal in width to the elytra. Body rather stout, parallel, convex, shining, pale testaceous in color throughout, the legs and antennae concolorous — probably immature; head well developed, the sides parallel, broadly, evenly rounded at base to the neck; eyes rather small, at more than three times their own length from the base; punctures notably coarse but well separated throughout; antennae not very stout, rather short, the median joints but little longer than wide in the female; prothorax oblong, slightly longer than wide, much narrower than the head, the sides parallel and straight in the middle, the angles broadly rounded, the anterior much more broadly than the posterior, the punctures similar to those of the head, coarse and rather widely separated, the median smooth line wide; elytra quadrate, parallel, barely as long as wide, equal in length to the prothorax and a third wider, the punctures very coarse, not close-set, arranged in rather uneven series throughout; abdomen parallel, fully as wide as the elytra, rather finely but not very closely punctate, shining. Male unknown; female with the sixth ventral broadly rounded at tip. Length 6.0 mm.; width 1.0 mm. California (Lake Co.).**validiceps** n. sp.

Head wider than the elytra; body more slender; elytra shorter than the prothorax except in *subseriata*.. 6

6 — Form moderately slender, dark rufo-piceous, the elytra and legs brighter rufous, the abdomen black, the antennae infuscate; head oval, somewhat longer than wide, parallel, the basal angles very broadly rounded to the neck; eyes rather small; antennae stout, distinctly incrassate distally, the medial joints about a third longer than wide, the punctures coarse and deep but well separated; prothorax narrow, elongate-oval, very much narrower than the head, the anterior angles very broadly rounded and wholly obsolete, the punctures coarse, deep and rather close-set; elytra parallel, slightly longer than wide, about a fifth wider than the prothorax and equal in length to the latter, the

punctures only moderately coarse, uneven and very obscurely lineate in arrangement; abdomen fully as wide as the elytra, parallel, somewhat finely but not closely punctate and shining. Male with a deep narrow impression in apical half of the median line of the fifth ventral, the sixth with a broad shallow apical sinus and adjoining triangular impression, the latter with short spiculose hairs much as in *jacobina* and allied species; female not at hand. Length 6.0 mm.; width 0.85 mm. Vancouver Island.................................**subseriata** Lec.

Form more slender and elongate and rather more depressed, the entire body and legs bright testaceous, the abdomen piceous-black, the antennae fuscous; head oblong, somewhat longer than wide, the sides parallel and feebly arcuate, the basal angles moderately broadly rounded to the neck; eyes unusually small, anterior; punctures moderately coarse, deep, well separated; antennae moderately stout, very distinctly incrassate distally; prothorax narrow, much elongated, very much narrower than the head, the sides subparallel, the apical angles less broadly rounded and obliterated than in *subseriata*, the punctures coarse and rather sparse; elytra parallel, somewhat longer than wide, about a fifth wider than the prothorax and slightly, though obviously, shorter, the punctures coarse, uneven and close-set, arranged in very uneven series; abdomen as wide as the elytra, finely, rather closely punctate and only feebly shining. Male with a rather larger rounded impressed and glabrous pit in apical half of the fifth ventral, the sixth very nearly as in *subseriata* and other species; female unknown. Length 6.7 mm.; width 0.8 mm. California (San Francisco).......................**vafra** n. sp.

Form very slender, smaller in size, dark piceo-rufous, the elytra and legs rather brighter rufous, the abdomen more blackish; head subquadrate, about as wide as long, the sides parallel and nearly straight; basal angles broadly rounded to the neck; eyes small and but slightly convex; punctures moderately coarse, rather close-set toward the sides and base; antennae very stout, distinctly incrassate distally, the medial joints but slightly longer than wide in the female; prothorax very much narrower than the head, elongate-oval, the sides straight in the middle, the anterior angles very broadly rounded and obliterated, the punctures coarse but well separated; elytra parallel, rather longer than wide, about a fourth wider and slightly, though obviously, shorter than the prothorax, the punctures moderately coarse, deep, close-set and arranged in even and broadly impressed series, becoming confused toward the inner apical angles; abdomen as wide as the elytra, finely, not densely punctate and rather shining. Male unknown; female with the sixth ventral evenly rounded behind, not lobed. Length 6.0 mm.; width 0.77 mm. British Columbia...........................**ustulata** n. sp.

The species described by Le Conte under the name *jacobina*, is the commonest Lathrobiid in California, occurring abundantly almost everywhere and varying greatly in size; one specimen was given me by Mr. Jülich, who stated that he took it near New York City; further questioning failed to shake the positiveness of Mr. Jülich that he himself had captured it and was confident of the locality. In a similar case a specimen of *gnoma* was sent to me many years ago by a correspondent, who stated that he had collected it at Keokuk, in Iowa. Having no reason to doubt the accuracy of either of these assertions, we must conclude that the species mentioned, as well as many other California beetles, are annually transported across the continent in earth about the roots of plants, in straw, among packed fruit or in other ways, but fail to establish themselves in the east because of the cold winters. *Ustulata* differs from *subseriata* in its more slender form and shorter elytra, with the punctures more evenly serial; as the elytra of the male are shorter than those of the female, upon which sex *ustulata* is founded, the abbreviation of the elytra in the male must be still more notable when compared with the male of *subseriata*. *Puncticeps* Lec. belongs to a very different genus from *puncticeps* Sharp, and the change of name of the former to *lecontei* by Duvivier (Cat., 1883), is not necessary.

Lobrathium Rey.

This genus and the two preceding form a rather natural group, having the basal angles of the head and the anterior angles of the prothorax very broadly rounded or obliterated. In the present genus the gular sutures differ more than is usually the case from species to species, but, although sometimes almost straight and approaching each other gradually posteriorly, they always diverge before attaining the base and are usually most approximate just behind the middle. The species are smaller, more depressed and with longer antennae than in the preceding genus, with the punctures less coarse as a rule, those of the pronotum being generally rather dense, in such manner that the smooth median line seems to be somewhat elevated or more convex than the rest of the surface. *Lobrathium* is more boreal than any of our other genera having an epipleural fold and is doubtless well represented in the great Canadian northwest, as well as in northern Asia and Europe; it descends along the mountains in America as far south as Colorado. It is not at all closely related to *Lathrotaxis*, which follows, although classified under the same head in the table on account of the form of the gular sutures, but, as before stated, belongs with *Lathrotropis* and *Eulathrobium*. The few species thus far brought to light within our territories may be briefly described as follows: —

Body broader and stouter, the prothorax but slightly elongate; pale rufo-testaceous throughout, the antennae and abdomen dusky; head large, fully as wide as long, parallel and nearly straight at the sides, the base broadly arcuato-truncate, the angles moderately broadly rounded; eyes moderate, the punctures rather small and close-set, sparse on the vertex; antennae but little longer than the head and prothorax, rather slender, the medial joints decidedly longer than the subapical and fully twice as long as wide; prothorax distinctly narrower than the head, widest anteriorly, the sides distinctly converging to the base and nearly straight, a fourth or fifth longer than wide, the anterior angles moderately broadly rounded, the punctures rather small but deep, irregular, close-set near the subelevated median line, the latter narrowly impressed behind the middle for a short distance; elytra slightly elongate, as wide as the head, subparallel with the sides feebly arcuate, scarcely longer than the prothorax and about a fourth wider, coarsely, very closely and sublinearly punctate; abdomen parallel, about as wide as the elytra, finely, closely punctate. Male with ventrals two to five strongly, not very broadly impressed along the median line throughout, the fifth with a broadly rounded shallow sinus as wide as the attendant impression; sixth broadly impressed throughout in median third in continuation of the preceding impressions, the apex with a narrower and abruptly formed sinus nearly as deep as wide and widely rounded at the bottom; impression anteriorly with a large patch of short black spiculiform hairs narrowly divided along the middle; female unknown. Length 7.0 mm.; width 1.1 mm. Washington State (Thurston Co.)..**tacomae** n. sp.

Body narrow and slender, the prothorax narrow and notably elongate; medial joints of the antennae about equal in length to the subapical and much less than twice as long as wide.............................. 2

2 — Sides of the prothorax feebly converging from apex to base, broadly and almost evenly arcuate throughout; dark fusco-testaceous, the elytra flavo-testaceous, gradually blackish-piceous in basal half; abdomen piceous-black, the legs dark ferruginous, the antennae dusky, longer than the head and prothorax, rather stout, feebly incrassate distally; head rather longer than wide, parallel and broadly arcuate at the sides, the base broadly arcuato-truncate, somewhat wider than the elytra, with the basal angles moderately broadly rounded, the punctures rather fine but deep and close-set toward the sides and base; prothorax much narrower than the head, a third longer than wide, the apical angles

moderately broadly rounded, the basal very small, the punctures rather fine but deep, unevenly disposed, dense internally, the median line not elevated; elytra much elongated, subparallel, a fourth wider and a fifth longer than the prothorax, coarsely, closely, very unevenly and subrugosely punctured, generally with feebly sublineate arrangement, especially toward base; abdomen parallel, as wide as the elytra, finely, rather closely punctulate and feebly shining. Male unknown; female with the sixth ventral pale in color and broadly rounded at tip. Length 5.8 mm.; width 0.9 mm. Montana (Kalispell), — Mr. Wickham...**montanicum** n. sp.

Sides of the prothorax broadly and evenly rounded anteriorly, thence distinctly converging and nearly straight to the base.................... 3

3 — Body and legs rufo-testaceous in color, the elytra faintly darker in basal half, the abdomen piceous-black, the antennae dusky; head slightly elongate, the sides parallel and feebly arcuate; base truncate, the angles moderately rounded, the punctures fine but strong, close-set, nearly wanting at the middle of the vertex; antennae rather thick, much longer than the head and prothorax, distinctly incrassate distally; prothorax small, much narrower than the head, fully a third longer than wide, not very coarsely but deeply and closely punctate, the median smooth line well defined and somewhat elevated; elytra rather small, slightly elongate, subparallel and feebly arcuate at the sides, about equal in length to the prothorax in both sexes and a third or fourth wider, coarsely, closely, unevenly and subrugosely punctate; abdomen as wide as the elytra, finely but rather strongly, moderately closely punctulate and somewhat shining. Male with ventrals two to four wholly unmodified, the fifth narrowly and just visibly flattened along the middle, the apex broadly sinuato-truncate; sixth with a feeble parallel and slightly oval impression, a third as wide as the segment and extending throughout the length, the bottom densely covered with short black spiculiform hairs which are slightly parted along the middle, the apex with a small abruptly formed, circularly rounded sinus, a third as wide as the apex and nearly twice as wide as deep; female with the sixth ventral more convex, broadly rounded at tip. Length 5.5–6.0 mm.; width 0.8 mm. Colorado (Ouray — 7500 feet elevation), — Mr. Wickham ....**coloradense** n. sp.

Body dark rufo-piceous in color, the elytra bright rufous in apical half, the abdomen black; legs and antennae rather pale, rufous; head not quite as wide as the elytra in the female, with the antennae stout, longer than the head and prothorax and evidently incrassate distally; sides parallel and feebly arcuate, the base subtruncate, the angles broadly rounded; eyes at two and one-half times their own length from the base; punctures rather small, deep and close-set, sparse on the vertex; prothorax small, much narrower than the head, nearly a third longer than wide, less finely but deeply and densely punctate, especially toward the smooth median line, which appears to be slightly elevated; elytra but slightly longer than wide, the sides parallel and feebly arcuate, two-fifths wider than the prothorax but only very slightly longer, the punctures only moderately coarse and not very close-set but uneven, subrugose and much confused; abdomen not quite as wide as the elytra, finely, closely punctate and slightly shining. Male unknown; female with the sixth ventral abruptly pale in color, more convex and broadly rounded at tip. Length 5.6 mm.; width 0.8 mm. Washington State..**bipartitum** n. sp.

European species, such as *bicolor* Er. and *picipes* Er., have the head much more rounded at base, the eyes smaller and the antennae very much more slender and elongate than any of these American forms, and it is possible that the latter may be generically or subgenerically separated at some time in the future; at present they seem most fittingly placed in *Lobrathium*, which is not by any means a subgenus of *Lathrobium*.

Lathrotaxis n. gen.

The species of this genus are of larger size than any of those which follow in the Lathrobia, comparing well in stature with the less numerous and far more localized *Lathrotropis*. The body is parallel and rather depressed, the coarse punctures always very sparse, except on the abdomen, where they are fine and close-set but not so dense as to give the dull and lustreless appearance characterizing most of the subsequent genera and resembling *Linolathra* more in this respect. The strongly marked anterior angles of the prothorax, in connection with the broad depressed form, shining surface and sparse, coarse sculpture, give to the members of *Lathrotaxis* a peculiar and pronounced habitus, differing greatly from the three genera immediately preceding but imitated in the minute forms constituting the genera *Pseudolathra*, *Linolathra* and others of this group. The thirteen species in my cabinet are distributed over the entire region north of Mexico and below the Canadian boundary, but are notably more abundant in the south and represented by only one or two species in the northeastern states, where *Lathrobium* and *Lathrobioma* are so abundant; they may be readily identified by the following outline descriptions: —

Body black or piceous-black, with the elytra and sometimes also the prothorax, paler.. 2
Body black throughout..11

2 — Head widest near the base, the sides diverging posteriorly from the eyes. Body very large in size, polished, black, the elytra bright rufous, with a black scutellar cloud, the abdomen toward tip, legs and antennae pale ferruginous; head large, rather wider than long, very coarsely and sparsely punctate, the sides broadly arcuate; angles rather narrowly rounded, the base broadly arcuato-truncate; eyes moderate; antennae long and slender, filiform, not at all incrassate distally, longer than the head and prothorax, the medial joints more than twice as long as wide and much longer than the subapical; prothorax only very slightly longer than wide and somewhat wider than the head, strongly obtrapezoidal, the sides straight; punctures rather coarse, very sparse, irregular, excepting a single close-set series at each side of the broad median smooth line; elytra quadrate, parallel, very slightly wider and longer than the prothorax, the punctures rather fine and arranged in uneven series; abdomen narrower than the elytra, shining. Male with the surface of the fifth and sixth ventrals wholly unmodified, the apex of the former with a broad and very shallow cuspidiform emargination, the latter with a large triangular apical notch but little wider than deep, one-half as wide as the apex, with its anterior angle slightly blunt; female unknown. Length 10.4 mm.; width 1.4 mm. Arizona (Williams), — Mr. Wickham........................**centurio** n. sp.

Head parallel at the sides.. 3

3 — Head and prothorax black or blackish, always darker than the elytra. 4

Head black, the prothorax rufous and concolorous with the elytra....... 7

Head and prothorax rufous and concolorous with the elytra.............10

4 — Abdomen not rufous at tip...................................... 5

Abdomen distinctly rufous at tip...................................... 6

5 — Body polished, black, the prothorax slightly picescent, the elytra dark though clear rufous, with a feeble piceous scutellar cloud; legs and antennae ferruginous; head subquadrate, as long as wide, the sides straight, the angles rounded for a short distance to the neck, which is three-fourths as wide as the head, the punctures coarse, uneven in size as usual and very sparse; antennae a little longer than the head and prothorax, moderately slender, feebly incrassate distally, the medial joints barely twice as long as wide and shorter than the subapical; prothorax oblong, only slightly longer than wide, slightly wider than the head, the sides straight and only just visibly converging throughout, the punctures moderately coarse, very sparse and irregularly distributed, the median smooth line bounded by a narrow closer aggregation of punctures, not regularly serial; elytra quadrate or slightly elongate, parallel, slightly longer than the prothorax and about a fourth wider, the punctures only moderately coarse but strong, arranged in regular and feebly impressed series; abdomen slightly narrower than the elytra. Male with the fifth ventral gradually, very feebly sinuate at the middle of the apex, the adjoining surface glabrous and shining but not impressed, the sixth with a broad shallow, gradually formed, broadly rounded sinus, about two-fifths as wide as the apex and six or seven times as wide as deep, the surface with a large median patch of dense and slightly stouter black hairs; female with the sixth ventral abruptly

much narrower than the preceding, rounded at tip. Length 7.5 mm.; width 1.18 mm. New York to Iowa and Texas (Galveston). **longiuscula** Grav.

6 — Form rather stout, polished, black, the rufous elytra with a black basal cloud, the legs and antennae pale; head quadrate, as long as wide, the sides straight; angles moderately rounded, the neck very wide as usual, the punctures coarse, very sparse; antennae long and rather stout, much longer than the head and prothorax, feebly incrassate distally, the medial joints rather more than twice as long as wide and longer than the subapical; prothorax nearly as in *longiuscula*, a little longer than wide, the sides more converging from apex to base, just visibly wider than the head, the punctures somewhat coarser and still sparser; elytra elongate, parallel, a fourth wider and longer than the prothorax, the punctures moderate, impressed, arranged in regular, scarcely impressed series, except near apex, where they are finer and confused; abdomen but little narrower than the elytra, finely, closely punctulate. Male with the fifth and sixth ventrals wholly unmodified on the surface, the former with a small shallow and gradually formed median sinus at apex, the emargination in the form of a feeble cusp with broadly rounded point, the sixth with a very large subcircularly rounded emargination, occupying the entire apex and fully twice as wide as deep. Length 7.0 mm.; width 1.27 mm. Texas.................. **soror** n. sp.

Form more slender, the elytra bright red, without a distinct basal cloud, the legs pale, the antennae slightly infuscate; head as in *soror* but smaller, the antennae rather thick, scarcely as long as the head and prothorax, barely at all incrassate distally, the medial joints about two-thirds longer than wide and longer than the subapical; prothorax rather distinctly elongate, equal in width to the head, slightly narrowed posteriorly, the sides nearly straight; basal angles more broadly rounded than the apical as usual, the punctures not coarse but deep, distinct, irregularly and sparsely distributed, more closely aggregated along the median smooth line; elytra parallel, but little longer than wide, very slightly longer than the prothorax and about a fifth wider, the punctures small and very feebly impressed, arranged serially, except toward apex, where they are broadly confused and still smaller; abdomen much narrower than the elytra, finely and not very closely punctate. Male with the fifth ventral broadly, subconically impressed in apical two-thirds, the impression clothed with short coarse black hairs extending obliquely outward from the glabrous median line, the apical margin sinuate across the end of the impression, the sinus as wide as the latter, evenly, circularly rounded and very shallow; sixth with a very deep and acutely ogival incisure, twice as deep as wide, the notch abruptly formed, with its opening two-fifths as wide as the apex, the surface not modified. Length 7.8 mm.; width 1.12 mm. Texas (Austin and Waco)........................ **fallaciosa** n. sp. (Fvl. MS.)

7 — Abdomen not rufous at tip. Body moderately large and unusually stout, the head and abdomen black, the remainder, including the legs, pale and rufous; antennae ferruginous; head moderate, subquadrate, the angles rounded as usual, not very coarsely, rather feebly and very sparsely punctate; antennae well developed, longer than the head and

prothorax, rather stout, feebly incrassate distally, the medial joints somewhat more than twice as long as wide and distinctly longer than the subapical; prothorax rather distinctly wider than the head, but little longer than wide, obtrapezoidal, the sides strongly converging and straight, the punctures small, very sparse and unevenly disposed, subserial along the smooth line; elytra slightly elongate, large, parallel, a fourth wider and longer than the prothorax, the punctures fine, very feeble, arranged in wholly unimpressed and somewhat regular series, except toward apex; abdomen distinctly narrower than the elytra, finely, closely punctulate. Male with the fifth and sixth ventrals wholly unmodified on the surface, the former scarcely visibly sinuato-truncate toward the middle at apex, the latter with a gradually formed sinus, slightly wider than deep, one-third as wide as the apex, the emargination broadly rounded at the bottom, with its sides at first feebly diverging posteriorly. Length 8.0 mm.; width 1.28 mm. Arizona (Winslow), — Mr. Wickham.
praeceps n. sp.

Abdomen rufous at tip...8

8 — Antennae shorter, the medial joints but slightly elongated. Body small and unusually slender, parallel, rufous in color, the head and abdomen — except toward tip — black, the legs and antennae pale testaceous; head rather longer than wide, coarsely, very sparsely punctate, the sides nearly straight and just visibly converging from the eyes to the broadly rounded basal angles; eyes well developed, at about one-half more than their own length from the base; antennae moderately thick, scarcely as long as the head and prothorax, but slightly incrassate distally, the medial joints scarcely one-half longer than wide, longer than the subapical; prothorax only very slightly longer than wide, just visibly wider than the head, the sides parallel and very feebly arcuate, the basal angles broadly rounded, the apical not at all rounded; punctures coarse and irregular along the smooth median line, small and very sparse elsewhere; elytra slightly elongate, parallel, a fifth wider and a fourth longer than the prothorax, the punctures coarse, arranged in regular and broadly impressed series; abdomen decidedly narrower than the elytra, minutely and rather sparsely punctulate. Male unknown; female with the sixth ventral narrow, evenly rounded at tip. Length 6.4 mm.; width 0.95 mm. New Mexico (Albuquerque).
angusta n. sp.

Antennae more elongate, longer than the head and prothorax, very feebly incrassate distally, with the medial joints almost twice as long as wide...9

9 — Form somewhat stout, rather dark rufo-testaceous throughout, the head piceous-black, the abdomen — except toward tip — black; head fully as long as wide, coarsely, very sparsely punctate, subimpunctate toward the middle as usual, the sides straight and parallel, the angles well rounded; eyes at three-fourths more than their own length from the base; prothorax distinctly wider than the head, but little longer than wide, the sides parallel and nearly straight, rounding toward base, the punctures rather coarse and very sparse throughout but serial and close-set along the median smooth space; elytra but slightly longer than wide, parallel, a fifth wider and a fourth longer than the pro-

thorax, the punctures coarse, arranged in scarcely impressed regular series; abdomen but slightly narrower than the elytra, finely, rather closely punctulate. Male with the surface of the fifth and sixth ventrals wholly unmodified, the apex of the former broadly, very feebly sinuate toward the middle; sixth with a broadly rounded, shallow, gradually formed parabolic sinus, half as wide as the apex and about four times as wide as deep; female not differing greatly, the antennae nearly similar in structure. Length 7.3 mm.; width 1.22 mm. Texas (El Paso),— Mr. G. W. Dunn — and New Mexico.................. ...**acomana** n. sp.

Form rather less stout and more elongate, similar in coloration, the testaceous parts brighter; head similar, the eyes a little larger, at barely one-half more than their own length from the base; prothorax narrower and more elongate, nearly a fifth longer than wide, not evidently wider than the head, the sides straight and parallel, the basal angles broadly rounded, the anterior right, scarcely more than blunt, the punctures only moderately coarse, feeble and very sparse, larger and closer but confused along the median smooth space; elytra distinctly elongate, parallel, a fifth wider and almost a fourth longer than the prothorax, the punctures rather small, impressed, arranged in regular and broadly impressed lines, except toward apex, where they are confused; abdomen somewhat narrower than the elytra, the punctures minute and not very close-set. Male with sexual characters similar to the preceding, the fifth ventral feebly sinuato-truncate throughout the width, the sinus of the sixth similar in form, three-fifths as wide as the apex. Length 7.5 mm.; width 1.15 mm. Montana (western), Utah (Provo) and Arizona (Winslow and East Bridge), — Mr. Wickham.........**rubricollis** n. sp.

10 — Body rather stout, parallel and less depressed than usual, moderately convex, shining, rufo-testaceous, the legs and antennae concolorous, the abdomen uniform in color throughout and rather pale piceo-rufous; head as wide as long, parallel and straight at the sides, the angles well rounded, the punctures coarse and rather close-set, the eyes unusually small, at much more than twice their own length from the base; antennae fully as long as the head and prothorax, moderately slender, very gradually and strongly incrassate distally, the medial joints two-thirds longer than wide; prothorax oblong, distinctly elongate, not quite as wide as the head, the sides subparallel and nearly straight, broadly rounding toward base, the punctures rather coarse and only moderately sparse, slightly more aggregated narrowly along the median smooth space; elytra but little longer than wide, parallel, about a fifth wider and longer than the prothorax, somewhat wider than the head, the punctures rather coarse, only moderately sparse and very uneven, only partially arranged in uneven series; abdomen distinctly narrower than the elytra, the punctures much coarser than usual above and beneath and rather close-set. Male with the surface of the fifth and sixth ventrals wholly unmodified, except a narrow impunctate and glabrous unimpressed line along the middle of each throughout, the apex of the former broadly, very feebly sinuate toward the middle, the sixth with a deep angulate notch at apex, the notch with straight sides rounding outwardly toward tip, a little deeper than wide, half as wide as the

segmental apex and with its anterior angle narrowly rounded. Length 6.7 mm.; width 1.15 mm. Middle States.........**polita** Grav.

Body similar to the preceding but still stouter, parallel, scarcely so convex, bright rufo-testaceous throughout and shining, the abdomen blackish-piceous, paler and rufescent at apex; head similar but broader, the basal angles more broadly rounded, the eyes sensibly larger, at barely twice their own length from the base, the punctures almost as coarse but denser toward the sides and sparser medially, the antennae nearly similar but with the medial joints rather more elongate; prothorax smaller and shorter, distinctly narrower than the head, not obviously longer than wide, the sides feebly converging from apex to base and broadly arcuate throughout, the punctures moderately coarse and sparse, not more densely aggregated near the median smooth space; elytra rather more elongate, parallel, a fourth wider than the prothorax and nearly a third longer, less coarsely, rather more sparsely and still less serially punctured; abdomen broader, nearly as wide as the elytra, rather less coarsely but almost as closely punctulate. Male with the surface of the fifth and sixth ventrals nearly as in *polita*, having a narrow glabrous median line throughout, but the fifth is less distinctly sinuate toward the middle of the apex and the surface is feebly impressed along the glabrous area near the apex; the notch of the sixth is more equilateral, fully three-fifths as wide as the apex, distinctly wider than deep, with its anterior angle slightly blunt. Length 6.4 mm.; width 1.18 mm. Florida (Crescent City)........................**floridae** n. sp.

11 — Body very depressed, the legs black with the tarsi paler; antennae very long and slender, with the medial joints much more than twice as long as wide; surface shining; head small, coarsely, very sparsely punctate laterally, broadly subimpunctate medially, rather wider than long, the sides nearly straight, feebly converging from the eyes to the basal angles, which are obtuse but only slightly rounded; eyes well developed; antennae black, almost half as long as the body, scarcely perceptibly incrassate toward tip; prothorax much wider than the head, only slightly longer than wide, the sides feebly converging from the apex and very slightly arcuate, broadly arcuate toward base, the punctures fine but distinct, very sparse, narrowly more aggregated along the median smooth line; elytra but little longer than wide, parallel, a third wider and longer than the prothorax, the punctures fine, rather sparse, partially serial in arrangement; abdomen distinctly narrower than the elytra, finely and closely punctulate. Male with the fifth ventral wholly unmodified, the apex rectilinearly truncate throughout, the sixth evenly and rather strongly rounded at tip, with a small triangular and rather abruptly formed emargination, about a sixth as wide as the base of the segment and rather deeper than wide, with its anterior angle slightly blunt, the surface with a narrow and simple glabrous cylindric impression along the median line throughout, the edges of the impression obtusely rounded; female with the sixth ventral broadly angulate at tip. Length 6.5 mm.; width 1.18 mm. California (Lake and Siskiyou Cos.).....................**californica** Lec.

Body normally convex, the legs and antennae pale; antennae shorter, less slender and more incrassate, not longer than the head and prothorax, with the medial joints less than twice as long as wide; lustre polished...12

12 — Form stouter; head well developed, fully as wide as long, the sides parallel and straight, the angles broadly rounded; eyes well developed, at less than twice their own length from the base, the punctures coarse, moderately sparse, wanting at the middle of the vertex; prothorax distinctly elongate, just visibly wider than the head, the sides parallel, nearly straight, the basal angles broadly rounded, the punctures only moderately coarse but less sparse than usual; elytra longer than wide, parallel, a fifth wider and barely a fourth longer than the prothorax, the punctures fine, arranged in rather regular and feebly impressed series almost throughout; abdomen distinctly narrower than the elytra, minutely, not very closely punctulate and somewhat shining. Male unknown; female with the sixth ventral conical, convex, rather narrowly but obtusely rounded at tip. Length 6.8 mm.; width 1.18 mm. California (Yuma).............................**atronitens** n. sp.

Form somewhat more slender and elongate; head very nearly as long as wide, coarsely and sparsely punctate, the sides behind the eyes nearly straight and just visibly converging to the broadly rounded basal angles; eyes at one-half more than their own length from the base; antennae rather thick, not quite as long as the head and prothorax, the latter distinctly elongate, very slightly wider than the head, the sides subparallel and nearly straight, broadly rounding toward base, the punctures rather coarse, sparse, narrowly aggregated along the median smooth area; elytra unusually elongate, parallel, fully a fourth longer than wide, about a fourth or fifth wider and a third longer than the prothorax, the punctures rather small but distinct, arranged in regular and broadly impressed series nearly throughout; abdomen obviously narrower than the elytra, minutely and rather sparsely punctulate and shining, black above, the under surface feebly rufescent throughout. Male unknown; female with the sixth ventral rather broadly rounded at tip. Length 7.0 mm.; width 1.05 mm. Texas (Galveston).......................................**galvestonica** n. sp.

The representatives of more distinct structural types, among the species above described, are *californica*, which stands alone, *polita* and *floridae*, which form an isolated group, and *longiuscula* and all the other species, which form a natural aggregate, although, as may be inferred, there are marked differences in coloration. The sexual characters of *fallaciosa* are remarkably different from those of any other species, the contrast between the very narrow deep ogival notch of the sixth ventral in that species, and the large, broadly rounded emargination of the same segment characterizing *soror*, for example, being very remarkable. It is probable that the *Lathrobium seriatum*, of LeConte, previously referred to, belongs to this genus, but it differs from any of the above forms in its more parallel sides, relatively smaller elytra and more converging sides of the head behind the eyes — among other characters. The Munich catalogue places *castanea* Grav., as a variety of *longiuscula*, but I have no means of confirming this at present.

Pseudolathra n. gen.

The two species at present comprising this genus are among the smallest known Lathrobiids; they have a peculiarly depressed form and extremely separated gular sutures, short hind tarsi, with the four basal joints very short and subequal, and other characters as stated in the table. They may be described as follows:—

Form slender, subparallel, shining, the abdomen dull and very densely punctulate; body pale rufo-testaceous, the head blackish-piceous, the elytra sometimes piceous near the scutellum, the abdomen blackish, gradually rufescent toward the tip, the legs and antennae pale; head rather small, not coarsely, very sparsely punctate, slightly wider than long, parallel and straight at the sides, arcuato-truncate at base throughout the width, the angles obtuse but only very slightly rounded; eyes rather well developed, somewhat prominent, at scarcely twice their own length from the base; antennae rather thick, feebly incrassate distally, nearly one-half as long as the body, the medial joints about one-half longer than wide; prothorax distinctly wider than the head in the male, less obviously so in the female, oblong, only slightly longer than wide, the sides distinctly converging from the strongly marked apical, to the broadly rounded basal, angles, and straight, the punctures fine and very sparse, except a close-set subimpressed series along the median smooth line, which are coarser; elytra slightly longer than wide, a fourth wider and a fifth longer than the prothorax, the sides straight and distinctly diverging throughout, the punctures rather sparse, fine, arranged in unimpressed series, confused toward tip; surface narrowly, deeply impressed along the sutural bead; abdomen nearly as wide as the elytra, minutely, very densely punctulate. Male with the fifth ventral unmodified, the sixth broadly rounded at tip, with a very shallow emargination in the form of a broad cusp, the adjacent surface with a small simple impression slightly longer than wide. Length 3.4 mm.; width 0.63 mm. Texas (Austin, Waco, Houston and Galveston), Louisiana (Morgan City) and Iowa. [=*Americana* Duviv.]......**analis** Lec.

Form and lustre somewhat similar to the preceding but larger, dark piceous in color, the head and abdomen black, the latter only feebly paler at the immediate tip; legs and antennae pale; head small, nearly as long as wide, the sides parallel, the basal angles distinctly rounded; eyes larger, at one-half more than their own length from the base, the punctures relatively coarse and less sparse; antennae similar; prothorax distinctly more elongate, wider than the head, the sides more nearly parallel, straight, the punctures coarser, rather sparse, the medial series similarly impressed; elytra much larger, distinctly elongate, two-fifths wider and a third longer than the prothorax, the sides straight and feebly diverging, the punctures fine and feeble, more close-set, the series very uneven and ill-defined. Male with the surface of the fifth and sixth ventrals wholly unmodified throughout, the latter not impressed at tip, the apex rather narrow, with a gradually formed subtriangular sinus, one-fourth as wide as the tip, distinctly wider than deep, with the bottom angle obtuse. Length 3.8 mm.; width 0.7 mm. Mississippi (Vicksburg) and Indiana (Cab. Levette)....**leviceps** n. sp.

The male of *analis*, from Morgan City, has the shallow cuspidiform emargination of the sixth ventral rather deeper, more abruptly formed or more triangular than the Texas males, and the eyes are a trifle smaller, but there are no other tangible differences.

Paralathra n. gen.

This genus is somewhat composite, for, with a general habitus which is not very distinctive and suggestive of *Lathrotaxis*, it has the gular sutures of *Lathrobiella* and the hind tarsi somewhat as in *Lathrotaxis*, from which it differs in in the form of the gular sutures, densely punctate and dull abdomen and narrower neck. The general surface is decidedly more convex than in *Pseudolathra*, the latter also having the gular sutures much more widely separated at base or more strongly divergent. I am compelled therefore to regard the single species as a distinct genus; it may be described as follows: —

Body rather stout, parallel, polished, the abdomen dull, pale and bright rufous in color, the head dark rufo-piceous, the abdomen infuscate, becoming rufescent at tip, the legs and antennae pale; head rather well developed, somewhat wider than long, parallel and nearly straight at the sides, truncate at base, with the angles distinctly rounded; eyes large and well developed but feebly convex, at about a third more than their own length from the base, the punctures extremely sparse, not very coarse; antennae nearly half as long as the body, slender, feebly incrassate distally, the medial joints not quite twice as long as wide;

prothorax very slightly wider than the head, but little longer than wide, the sides parallel and nearly straight, the apical and basal angles narrowly and subequally rounded, convex, the punctures fine, very sparse, coarser in a more close-set series along the median smooth line, the series wholly unimpressed; elytra slightly elongate, a fourth wider and longer than the prothorax, the sides just visibly diverging throughout and nearly straight, the punctures fine, rather sparse, arranged in somewhat close-set, broadly impressed series, except toward tip where all sculpture becomes very feeble; abdomen broad, as wide as the elytra. Male unknown; female with the sixth ventral narrow, evenly rounded at tip. Length 4.6 mm.; width 0.88 mm. Colorado (Greeley). **filicornis** n. sp.

A single specimen only of this species was received from Mr. Wickham some years ago.

Linolathra n. gen.

The comparatively few known species of this genus have a very distinct habitus, due to their small size, narrow and rather convex parallel form, polished surface, with very coarse and sparse elytral punctures, and distinct but not close-set abdominal sculpture. They are strongly suggestive of *Dacnochilus* and are really much more closely related to that genus than to *Lathrotaxis* or *Lathrobiella*. The four species represented in my cabinet may be readily known as follows: —

Head and abdomen black... 2
Head and abdomen pale in color....................................... 4
2 — Tip of the abdomen rufous. Body parallel; prothorax, elytra and legs pale and bright rufous, the elytra not definitely darker toward base; head scarcely as long as wide, the sides subparallel and feebly arcuate, the angles well rounded; base subtruncate, the neck scarcely half as wide as the head; eyes convex, at rather less than twice their own length from the base, the punctures somewhat coarse, very sparse; antennae moderately thick, very feebly incrassate, distinctly longer than the head and prothorax, the medial joints less than half longer than wide; prothorax small, slightly elongate, somewhat narrower than the head, the sides parallel and feebly arcuate; anterior angles distinct, the basal rounded, the punctures moderately coarse, forming one or two shorter curved lateral series and a well marked close series along the median impunctate area, the latter series impressed toward base; elytra quadrate, parallel, much wider than the head, a third wider and nearly a fourth longer than the prothorax, the punctures coarse, impressed, sparse, disposed in three or four series, the sutural being very widely separated from the next discal series; abdomen slender, much nar-

rower than the elytra, rather shining. Male with a small, abruptly formed, semicircular emargination at the apex of the fifth ventral, the notch fully twice as wide as deep and a tenth as wide as the apex, the adjacent surface glabrous, just visibly impressed along the middle for a short distance; sixth segment longitudinally impressed along the middle, the impression shallow but well defined, gradually narrowing anteriorly throughout and extending nearly to the base, the apex with a broadly rounded and gradually formed sinus, three-fifths as wide as the apex and four or five times as wide as deep. Length 5.0 mm.; width 0.7 mm. Texas (Austin and Del Rio)..................**gaudens** n. sp.

Tip of the abdomen not paler.. 3

3 — Head less distinctly narrower than the elytra; antennae longer, thicker and distinctly incrassate distally. Body parallel, moderately slender, bright testaceous in color, the legs concolorous, the antennae infuscate except at base and apex; elytra abruptly black in basal three-fifths to half; head slightly wider than long, the sides parallel and feebly arcuate; base arcuato-truncate, the angles obtuse but scarcely rounded; eyes at nearly twice their own length from the base, the punctures very sparse; antennae unusually developed, thick, the median joints about one-half longer than wide, slightly longer than head and prothorax, the latter slightly elongate, parallel, distinctly narrower than the head, the anterior angles not rounded, the basal rather broadly; sides straight, the punctures fine, very sparse laterally, with a single slightly impressed series of larger punctures along the median smooth space; elytra scarcely longer than wide, a fourth wider and about a fifth longer than the prothorax, punctured nearly as in the preceding species but rather more closely and less coarsely; abdomen narrower than the elytra. Male with sexual characters as in *gaudens*, except that the emargination of the fifth ventral is still smaller, much more gradually formed and three or four times as wide as deep and with the entirely similar impression of the sixth shorter, coming far from attaining the segmental base. Length 4.6 mm.; width 0.7 mm. Texas (Columbus). [=*horni* Duviv.]..............................**dimidiata** Say

Head smaller, always very much narrower than the elytra; antennae thinner and only feebly incrassate but as long as the head and prothorax. Body slightly more slender, nearly similar in coloration, except that the elytra are variable in ornamentation, some examples having a blackish though more or less medial cloud in almost basal half, others with the cloud almost obsolete; head fully as long as wide, rather coarsely but very sparsely punctate toward the sides, the latter generally feebly converging from the eyes to the rounded basal angles; prothorax distinctly elongate, subparallel, with broadly rounded basal angles, only very slightly narrower than the head, the punctures rather coarse, widely scattered near the sides, more distinct in the subimpressed series along the medial smooth area as usual; elytra nearly as in *dimidiata* but narrower and distinctly elongate; abdomen narrower than the elytra. Male with the emargination of the fifth ventral very gradually formed, shallow, broadly rounded, three or four times as wide as deep and an eighth or ninth as wide as the segment; sixth segment with the impression shorter and broader, conical, with its apex broadly rounded and not acute as in the preceding species, the shallow and broadly rounded apical sinus nearly similar, fully three-fifths as wide as the apex. Length 4.4 mm.; width 0.65 mm. Virginia, Tennessee, Mississippi (Vicksburg) and Texas (Austin)...........**filitarsis** n. sp.

4 — Body slender, polished, pale yellowish-testaceous in color, the abdomen sometimes slightly piceous with the apex broadly rufescent; head parallel at the sides, the angles obtuse but only slightly rounded, the base arcuate, the punctures fine and very sparse; antennae as long as the head and prothorax, rather slender and only very feebly incrassate distally; prothorax slightly elongate, only just visibly narrower than the head, the sides subparallel and nearly straight, the apical angles very narrowly, the basal broadly, rounded; surface with a few coarse punctures forming an arcuate series near the sides anteriorly and others forming the usual series bounding the median impunctate area; elytra distinctly elongate, subparallel, two-fifths wider and a third longer than the prothorax, the punctures fine and extremely sparse, arranged in a few series as in the preceding species; abdomen slightly narrower than the elytra, more minutely and more closely punctulate than in *filitarsis* and the other species. Male not at hand; female with the sixth ventral very broadly and feebly rounded behind. Length 4.0 mm.; width 0.62 mm. Arizona (Tuçson)................**lituaria** Lec.

The species described by Say under the name *Lathrobium dimidiatum*, is improperly identified in our cabinets, the name being applied to the species called *filitarsis* in the table. *Filitarsis* appears to be rather inconstant in other respects than the coloration of the elytra, for example in the convergence of the sides of the head behind the eyes, some examples having the sides parallel without regard to sex. The male sexual characters, are, however, virtually constant, and so no division can be attempted. Dr. Sharp records *dimidiata* from Mexico, but the species is probably not the same, although congeneric, as may also be the case with *pusilla* Shp., from Tabasco.

Lathrobiella n. gen.

This genus is the most extensive of the plicate Lathrobia and is composed of small species, frequently closely allied among themselves. It has the same geographical distribution as *Lathrotaxis*, although inclined to a more northern range, and, up to the present time, is wanting as far as known in California, where *Lathrotaxis* is represented by a single very isolated species, *atronitens* belonging to the Sonoran fauna and not truly to that of California. The species represented in my cabinet may be divided for convenience into several sections, as shown in the table, based largely upon general habitus. The section represented by *ambigua* Lec., is very distinct in facies from the others. The species may be known by the following characters: —

Species of the *ventralis* type. Head small; prothorax larger, parallel, with all the angles rounded, the elytra large, with the punctures finer, more close-set and sometimes not distinctly serial........................ 2

Species of the *collaris* type. Head small; prothorax nearly as in the preceding, the anterior angles generally less rounded, the surface more coarsely punctured; elytra wider and longer than the prothorax but usually smaller than in the *ventralis* type, with the punctures coarser, sparser and arranged in more or less impressed series.............. 3

Species of the *aemula* type. Head moderately small; prothorax oblong, with all the angles more or less rounded; elytra much less developed, but little wider and longer than the prothorax, with the punctures arranged in close-set impressed series........................... 7

Species of the *ambigua* type. Body smaller and more depressed than in the preceding sections, the head subequal in width to the prothorax, the latter elongate, parallel, narrow, with the sides straight, the anterior angles right and not obviously rounded; elytra longer and much wider than the prothorax, with the punctures rather irregularly serial..... 10

2 — Body moderately stout, black, the prothorax slightly piceous, the entire abdomen paler, dark piceo-rufous, the legs and antennae pale; surface polished, the abdomen densely dull; head about as long as wide, the sides behind the eyes distinctly converging and straight to the basal angles, which are obtusely rounded, the punctures coarse and sparse; eyes rather prominent, at one-half more than their own length from the base; antennae moderately slender, feebly incrassate distally, as long as the head and prothorax, the medial joints about one-half longer than wide; prothorax much wider than the head, distinctly longer than wide, the sides parallel and very feebly arcuate, the punctures not very coarse but deep and distinct, sparse, more aggregated narrowly along the median smooth line; elytra parallel, distinctly elongate, two-fifths wider and longer than the prothorax, the punctures not very coarse but deep and strong, rather close-set, the series indistinct and extending only slightly behind the middle; abdomen slightly narrower than the elytra, parallel, straight at the sides, minutely and very densely punctulate. Male unknown; female with the sixth ventral broadly subangulate at tip, the angle obtusely rounded. Length 4.7 mm.; width 0.88 mm. Texas (Galveston) ....**nigricans** n. sp.

Body rather more slender and elongate, shining with the abdomen densely dull, pale rufo-testaceous in color, the head black, the elytra black but rufo-piceous narrowly along the suture and broadly toward base, the abdomen infuscate; legs and antennae pale; head as long as wide, the sides behind the eyes very feebly converging and straight to the obtuse but only slightly rounded basal angles, the base truncate; punctures sparse, rather coarse; antennae nearly as in *nigricans* but rather thicker, the medial joints less than one-half longer than wide; prothorax more elongate, distinctly wider than the head, parallel and very feebly arcuate at the sides, the punctures only moderately sparse, rather coarse and distinct, unevenly serial along the median smooth area; elytra much elongated, parallel, fully a third wider and longer than the prothorax, the punctures small but distinct, rather close-set, serial except toward tip, sometimes rather confused throughout; abdomen parallel, distinctly narrower than the elytra. Male with the fifth ventral unmodified, the sixth feebly impressed along the middle, the sides of the impression obtusely rounded and not abrupt, the apex with a subtriangular sinus with rounded angle, nearly a third as wide as the apex, somewhat wider than deep and apparently eccentric and asymmetric, being to the right of the centre — estimating from the segmental base — and with its right side more strongly diverging from the axial line than the left; female not at hand. Length 4.5 mm.; width 0.8 mm. New Jersey. [= *Lathrobium tricolor* Csy.?] ....**ventralis** Lec.

Body larger and much stouter, the head black; prothorax and elytra uniform and concolorous, rufo-piceous, the abdomen piceous-black, becoming rufous at tip and narrowly at the apex of each segment; legs and antennae testaceous; head nearly as in *ventralis*, the eyes rather larger, the nearly straight sides equally feebly converging and meeting the broadly arcuate base in obtuse angles, which are scarcely at all rounded; prothorax distinctly elongate, much wider than the head, parallel, the sides broadly arcuate, the punctures rather coarse and not very sparse, not lineate along the smooth area; elytra large, much elongated, subparallel, a third wider and two-fifths longer than the prothorax, the punctures not coarse but distinct, impressed, rather close-set and partially serial; abdomen broad, equal in width to the elytra, finely and densely punctulate. Male unknown; female with the sixth ventral very obtusely subangulate and rounded at tip. Length 4.9 mm.; width 0.92 mm. Pennsylvania..**barda** n. sp.

3 — Antennae half as long as the body in the male, rather shorter in the female, slender, but very slightly incrassate distally, the medial joints nearly twice as long as wide. Body rather stout, only moderately convex, colored as in *collaris;* head fully as long as wide, coarsely and sparsely punctate, parallel at the sides, the angles rounded; prothorax large, only very slightly longer than wide, smaller and straighter at the sides in the female, much wider than the head, the sides feebly convergent from apex to base and broadly, evenly arcuate throughout; anterior angles rather distinct, the punctures fine and very sparse, lineate along the median smooth space; elytra depressed, slightly elongate, the sides feebly diverging and straight throughout, a fourth wider and a third longer than the prothorax, the punctures strong, though not very coarse, not close-set, arranged in even impressed series, confused toward tip; abdomen broad, scarcely narrower than the elytra, minutely, densely punctulate. Male with the fifth ventral unmodified, the sixth not impressed but broadly glabrous toward the middle, the apex with a large triangular notch much wider than deep, two-fifths as wide as

the apex, gradually formed, with the angle distinctly rounded, the lobes of the apex evenly and rather strongly rounded. Length 4.6–5.4 mm.; width 0.88 mm. Iowa and Nebraska (Lincoln)....**gracilicornis** n. sp.

Antennae distinctly less than half as long as the body; the medial joints less elongate.... 4

4 — Prothorax smaller when compared with the elytra, its sides frequently almost straight..5

Prothorax larger, the sides parallel and always distinctly arcuate........6

5 — Prothorax parallel and broadly arcuate at the sides; body moderately stout, convex, polished, bright rufous, the legs and antennae pale, the head black, the abdomen piceous-black, dull rufescent at tip; head as long as wide, parallel and straight at the sides, with broadly rounded basal angles, coarsely and sparsely punctate; antennae in the male as long as the prothorax and elytra combined, only moderately slender, scarcely at all incrassate, the medial joints three-fourths longer than wide, a little shorter and thinner in the female; prothorax in the male only slightly elongate, rather distinctly wider than the head, finely but distinctly, very sparsely punctate, the punctures irregularly subserial along the smooth area, narrower in the female, with the sides almost straight; elytra distinctly longer than wide, the sides subparallel and almost straight, fully two-fifths wider and longer than the prothorax in both sexes, the punctures not coarse but distinct, arranged in regular and scarcely impressed series almost throughout; abdomen much narrower than the elytra, densely punctulate. Male with the fifth ventral unmodified, the sixth glabrous and very faintly impressed along the middle, the apex with a very small triangular emargination, slightly wider than deep, with its angle narrowly rounded, about a sixth or seventh as wide as the apex, the lateral lobes strongly rounded; female with the sixth ventral broadly parabolic at tip. Length 5.7 mm.; width 0.95 mm. Oregon.....................**oregonensis** n. sp.

Prothorax parallel and virtually straight at the sides — at least in the female; — body rather more slender and parallel, bright rufous throughout, except the head which is black, the piceous-black abdomen rufescent at tip; head rather well developed, somewhat wider than long, parallel at the sides, the basal angles only moderately broadly rounded; eyes rather prominent, well developed, the punctures coarse and sparse; antennae in the female but little longer than the head and prothorax, rather thick, distinctly incrassate distally, the medial joints two-thirds longer than wide; prothorax distinctly elongate, only slightly wider than the head, the sides subparallel and straight, the punctures unusually coarse, deep and conspicuous and only moderately sparse; elytra parallel, slightly elongate, a third wider and longer than the prothorax, with moderate punctures not very close-set in regular impressed series, confused toward tip; abdomen distinctly narrower than the elytra. Male unknown. Length 5.5 mm.; width 0.9 mm. Tennessee (Nashville)....................................**fallax** n. sp.

6 — Antennae nearly half as long as the body, rather thick, distinctly incrassate distally, the medial joints only slightly less than twice as long as wide; head small, as long as wide, parallel at the sides, the angles broadly rounded, the punctures coarse and sparse; prothorax a

little longer than wide, much wider than the head in both sexes, the sides subparallel and feebly arcuate, the basal angles broadly rounded, the punctures fine, feeble, very sparse and inconspicuous; elytra parallel, distinctly elongate, about a fourth wider and a fifth longer than the prothorax in the male, relatively wider and longer in the female, the punctures not very coarse, strongly impressed and distinct, not very close-set in distinctly impressed series, confused toward tip; abdomen rather wide, but little narrower than the elytra, densely punctulate. Male with the fifth ventral unmodified, the sixth narrowly glabrous and subimpressed along the middle, the apex with a triangular emargination about as deep as wide, gradually formed, about a third as wide as the segmental apex, with its angle acute and not obviously rounded; lobes of the apex strongly, evenly rounded; female more abundant than the male, nearly similar but with a relatively smaller prothorax. Length 5.0–5.8 mm.; width 0.85–0.92 mm. Massachusetts, Rhode Island, New York, Pennsylvania, Indiana and Iowa...**collaris** Er.

Antennae rather stout, distinctly incrassate distally, nearly half as long as the body, with the medial joints about three-fourths longer than wide in the male; coloration as in *fallax;* head fully as long as wide, rather coarsely, very sparsely punctate, nearly as in *collaris* but with the basal angles less broadly rounded; prothorax as in *collaris* but shorter, only very slightly longer than wide, the sides distinctly arcuate, similarly finely and sparsely punctate; elytra distinctly elongate, the sides subparallel, a third wider and longer than the prothorax, the punctures smaller, feebler and less close-set than in *collaris* but similarly arranged, the series much less impressed; abdomen narrower, distinctly narrower than the elytra, densely dull and punctulate as usual. Male with the fifth ventral unmodified as usual, the sixth narrowly glabrous along the middle only in posterior half or slightly more, not distinctly impressed, the apex with a very small triangular notch about as deep as wide, only about a fifth as wide as the apex, the angle of the notch not distinctly rounded, the lobes of the segmental apex rounded, the notch apparently somewhat asymmetric, the right side — proceeding from the segmental base — being more divergent than the left; female unknown. Length 5.3 mm.; width 0.85 mm. North Dakota (Devil's Lake).......................................**vagans** n. sp.

Antennae thick but filiform, not appreciably incrassate distally, only very slightly longer than the head and prothorax in the female, the medial joints nearly as in *vagans*; coloration as in that species; head small, nearly as in *vagans* throughout; prothorax rather large, distinctly wider than the head and longer than wide, the sides parallel, broadly arcuate, more rounded posteriorly and narrowed toward base as usual, the punctures small but deep and distinct, sparse; elytra much elongated, the sides subparallel, two-fifths wider and longer than the prothorax, the punctures very fine and feeble, inconspicuous, widely set in unimpressed series, confused toward tip; abdomen parallel, densely dull, much narrower than the elytra. Male unknown. Length 5.7 mm.; width 0.9 mm. Nevada (Elko), — Mr. Wickham.........**habilis** n. sp.

7 — Male sexual characters of the *collaris* type, a small triangular notch at

the apex of the sixth ventral, the surface not obviously impressed.... 8

Male sexual characters more pronounced, the notch of the sixth ventral larger and deeper, the surface impressed........................ 9

8 — Antennae more slender than in *collaris*, gradually, rather distinctly incrassate distally, much longer than the head and prothorax, the medial joints distinctly less than twice as long as wide; body decidedly more slender than in any of the preceding species, colored nearly as in *collaris*, the elytra more piceous, the abdomen dark and fuscous, scarcely paler at tip; head nearly as in *habilis*, the punctures rather small and very sparse; prothorax distinctly elongate and wider than the head, the sides parallel, evenly arcuate throughout, not more converging toward base, the apical and basal angles almost equally rounded; punctures very fine, sparse and inconspicuous; elytra much elongated, parallel, scarcely a fourth wider and about a third longer than the prothorax, the punctures very fine but distinctly impressed, not close-set in almost wholly unimpressed series; abdomen slender but only slightly narrower than the elytra, densely dull. Male unknown;; female with the sixth ventral obtuse and very broadly ogival at tip. Length 5.0 mm.; width 0.8 mm. Virginia (Fredericksburg)....................**merens** n. sp.

Antennae as in *merens* but longer, stouter and much more strongly incrassate distally, extending nearly to the middle of the elytra; body still more slender, almost similarly colored, the head black, the prothorax bright testaceous, the elytra darker piceo-testaceous, the abdomen blackish, rufescent toward tip; legs and antennae pale; head nearly as in *merens* but with the basal angles very much more broadly rounded; prothorax similar but larger, distinctly elongate and wider than the head, parallel, the sides evenly and feebly arcuate, the four angles subequally rounded; punctures equally fine and sparse, except in the series along the median smooth area, where they are larger, the series distinctly impressed, except very near the base and toward apex; elytra subparallel, elongate, barely a fifth wider, and a fourth longer than the prothorax, the punctures small and arranged in broadly and distinctly impressed series; abdomen narrower than the elytra, minutely, densely punctulate but less dull than in some other species. Male with the fifth ventral wholly unmodified, the sixth narrowly glabrous and subimpressed along the middle, the apex with a triangular notch, much wider than deep, fully two-fifths as wide as the apex, gradually formed and with its anterior angle slightly blunt, the notch evidently eccentric and asymmetric, being situated slightly to the right of the centre and having its right side much more widely diverging than the left; female not known. Length 5.4 mm.; width 0.78 mm. North Carolina (Asheville). **aemula** n. sp.

9 — Body rather slender, fusiform, the head and abdomen piceous-black, the latter not rufescent at tip; prothorax dark testaceous to piceous, the elytra blackish-piceous, sometimes paler along the suture and at base; legs and antennae testaceous; head just visibly narrowed from the eyes to the moderately rounded basal angles, the sides straight; eyes well developed, the punctures rather coarse, very sparse; antennae extending to basal third of the elytra, rather stout, moderately incrassate, the medial joints scarcely more than one-half longer than wide;

prothorax obviously elongate, much wider than the head, the sides parallel and straight, the basal angles rather more rounded than the apical, the punctures fine, very sparse, larger and more close-set in the unimpressed series limiting the medial smooth space; elytra elongate, a fourth to fifth wider and a third to fourth longer than the prothorax, subparallel at the sides, the punctures fine and not close-set, arranged in unimpressed series; abdomen distinctly narrower than the elytra, densely punctulate and dull. Male with a very small, extremely shallow sinus at the middle of the apex of the fifth ventral, the sixth strongly impressed along the middle, the impression rather abruptly limited laterally, gradually narrowing from the apex and disappearing near basal fourth, the apex with a large deep and abruptly formed triangular notch, two-fifths as wide as the apex and fully one-half deeper than wide, with its angle narrowly rounded, the notch wholly within the impression, which extends narrowing along its sides to the apex, the apical lobes narrowly rounded; female with the sixth ventral obtusely rounded at tip. Length 4.5 mm.; width 0.75 mm. Mississippi (Vicksburg).
modesta n. sp.

10 — Eyes of normal size and prominence, situated at distinctly less than twice their own length from the base 11

Eyes notably smaller than usual, situated at about twice their own length from the base 12

11 — Body rather slender, the head black, the prothorax pale testaceous, the elytra pale flavo-testaceous, with a small piceous cloud at the scutellum; abdomen blackish, rufescent in apical third; legs and antennae pale; head rather wider than long, very sparsely punctate, the sides parallel; angles only moderately rounded; antennae rather stout, moderately incrassate distally, extending to basal third of the elytra, the medial joints less than one-half longer than wide; prothorax oblong-elongate, parallel, just visibly wider than the head, the punctures small but distinct, sparse, somewhat larger and close-set in the series bounding the medial smooth area; elytra evidently longer than wide, the sides diverging throughout and straight, fully two-fifths wider and longer than the prothorax, finely, very sparsely punctate, the punctures arranged in unimpressed series; abdomen rather wide, but little narrower than the elytra, minutely, closely punctulate but only moderately dull in lustre. Male unknown; female with the sixth ventral narrowly and strongly rounded at tip. Length 4.2 mm.; width 0.7 mm. New York (near the city) .... **fragilis** n. sp.

Body somewhat more slender; head obscure testaceous to piceous-black, the prothorax and elytra pale flavo-testaceous, the latter with a rounded piceous cloud about the scutellum; abdomen fuscous, paler toward tip, the legs and antennae pale; head as in *fragilis* but narrower and as long as wide, the basal angles still more narrowly rounded; antennae longer and more slender, extending fully to the middle of the elytra, only very feebly incrassate distally, the medial joints rather more than one-half longer than wide; prothorax narrower and relatively more elongate, subparallel and straight at the sides, only very slightly wider than the head, punctured as in *fragilis;* elytra similar in form though relatively larger, more strongly and closely punctate, nearly one-half wider and two-fifths longer than the prothorax; abdomen narrower, more densely punctulate and dull, distinctly narrower than the elytra. Male with the fifth ventral wholly unmodified, the sixth elongate-ogival in form, the very narrow apex with a minute and circularly rounded, very abruptly formed emargination, a third wider than deep, the lobes of the apex acute and not rounded, the surface adjacent with an ill-defined but distinct impression along the median line, strongest at apex and disappearing at two-fifths from the base; female nearly as in *fragilis*. Length 4.0 mm.; width 0.68 mm. Pennsylvania, Indiana and Mississippi (Vicksburg)................................**rubida** n. sp. (Fvl. MS.)

12 — Head slightly wider than the prothorax. Body very slender, the head and prothorax piceous-black, the elytra testaceous, with a piceous scutellar cloud; abdomen blackish, rufescent at tip, the legs and antennae pale; head well developed, sparsely, rather coarsely punctate, parallel at the sides, the angles rather broadly rounded; eyes very small, at two and one-half times their length from the base; antennae moderate, slightly incrassate, the medial joints scarcely one-half longer than wide; prothorax narrow and notably elongate, the sides just visibly converging throughout and straight, the punctures sparse but rather coarse, very close-set in a single impressed series at each side of the medial smooth area; elytra narrow and elongate, the sides straight, only just visibly diverging, the punctures fine, sparse, arranged in unimpressed series; abdomen not quite parallel, at base distinctly narrower than the elytra, but, posteriorly, fully as wide as the latter, finely but not very densely punctulate and feebly shining. Male with the fifth ventral wholly unmodified, the sixth broadly obtuse at tip, with a parabolic and gradually formed sinus, a third as wide as the apex, twice as wide as deep and symmetric, the adjoining surface narrowly and feebly impressed along the middle for a short distance; female unknown. Length 4.7 mm.; width 0.68 mm. Iowa..............**famelica** n. sp.

Head more or less distinctly narrower than the prothorax................13

13 — Form slender, subparallel, slightly depressed, pale testaceous throughout, the elytra sometimes clouded with piceous toward, but not attaining, the suture; head and abdomen piceous or black, the latter rufescent toward tip; head parallel at the sides, very sparsely punctate, the basal angles not broadly rounded; eyes at very slightly less than twice their own length from the base; antennae rather thick, extending nearly to the middle of the elytra, feebly incrassate, the medial joints barely one-half longer than wide; neck distinctly more than half as wide as the head; prothorax elongate, narrow, parallel, the sides straight, punctured as in *rubida*; elytra elongate, the sides feebly diverging and straight, two-fifths wider and fully a third longer than the prothorax, the punctures moderate, impressed, rather close-set in scarcely impressed series; abdomen narrower than the elytra, subequal thereto posteriorly, densely punctulate and dull. Male with the sixth ventral nearly as in *rubida*, the apex slightly more obtuse, the notch a little larger and twice as wide as deep and the impression of the surface broader, feebler and less defined. Length 4.2 mm.; width 0.7 mm. Iowa and Lake Superior..............................**ambigua** Lec.

Form slender, parallel, nearly similar to the preceding but more convex, blackish-piceous, the prothorax but slightly paler; elytra with a piceous scutellar cloud; abdomen rufescent at tip, the legs and antennae pale; head larger, coarsely and rather less sparsely punctate, parallel, the basal angles moderately rounded; eyes at twice their length from the base; antennae rather slender, nearly half as long as the body, feebly incrassate distally, the medial joints two-thirds longer than wide; prothorax elongate, scarcely visibly wider than the head, subparallel, all the angles well rounded, the punctures fine, sparse, more distinct and rather unevenly crowded in the feebly impressed series along the medial smooth area; elytra elongate, the sides straight and very feebly divergent, about a fourth wider and scarcely a third longer than the prothorax, punctured nearly as in *ambigua;* abdomen parallel, subequal in width to the elytra, finely but strongly, densely punctulate and rather dull. Male unknown; female with the sixth ventral very broadly rounded and obtuse at tip. Length 4.3 mm.; width 0.68 mm. Indiana ? (Cab. Levette). **integra** n. sp.

Form slender and parallel, normally convex, larger than the two preceding, pale and bright testaceous in color, the head and abdomen black or slightly piceous, the latter rufescent at tip; head very sparsely, rather coarsely punctate, parallel, the basal angles rather well rounded; eyes at slightly less than twice their own length from the base; antennae moderately long and slender, only just visibly incrassate, the medial joints three-fourths longer than wide; neck one-half as wide as the head; prothorax oblong, parallel, the sides straight, all the angles rounded, distinctly elongate and slightly wider than the head, the punctures rather small but strong, only moderately sparse, not larger and only indistinctly seriate along the median smooth space; elytra slightly elongate, parallel and straight at the sides, a third wider and one-fourth longer than the prothorax, the punctures fine but distinct, rather close-set in very feebly impressed narrow series; impression along the sutural bead narrow but deep and conspicuous; abdomen subparallel, narrower than the elytra, finely, densely punctulate though slightly shining. Male unknown; female with the sixth ventral broadly rounded at tip. Length 5.2 mm.; width 0.78 mm. North Carolina (Asheville)....................**angustula** n. sp.

The eccentricity and asymmetry of the secondary male sexual modifications seems to be a reality in many species of this genus, for it is unlikely that abnormalities of this kind would occur with such uniformity and with such constancy of character. In this connection the reader is referred to a pronounced asymmetry in the secondary sexual characters of *Palaminus*, alluded to some years ago by the writer. There are four quite distinct types of male sexual characters in *Lathrobiella:* first the usual triangular notch of the *ventralis* and *collaris* groups, also appearing in *aemula* and probably *merens;* second the more strongly marked modifications characterizing *modesta*—

rather a singular circumstance in view of the notable external similarity of this species to *aemula;* third the rounded sinus of *famelica*, and, fourth, the pointed sixth segment with very minute notch observable in *ambigua*, *rubida* and probably *fragilis*, these last species differing from the others also in the much more widely diverging gular sutures, less pronounced difference between the first and second joints of the hind tarsi and more depressed form, — so that they probably constitute at least a subgenus. The grouping in the table is arbitrary and based solely upon general habitus, in order to facilitate identification. The *ambigua* group, for example, contains several discordant elements.

Of the species allied to *collaris*, as given above — these being likely to prove most troublesome to the identifier, — it may be stated in short that *gracilicornis* is distinguished by its longer antennae, *oregonensis* by its larger and broader elytra, *follax* by the strong pronotal sculpture, *vagans* by sexual differences in the male and rather more slender form, and, *habilis*, by its almost completely non-incrassate antennae and very feeble elytral sculpture. There are other forms which appear to be offshoots of the *collaris* stem, but at present it would serve no useful purpose to describe them. *Collaris* is an abundant species, widely diffused through the northeastern parts of America and is one of the few plicate Lathrobiids thus far known to occur in the New England states.

Tricolor was stated some years ago by Dr. Horn to be a synonym of *ventralis* Lec., but I am by no means certain of the correctness of this synonymy, the unique type of *ventralis* differing considerably in color. Additional comparisons are desirable. The above description is drawn from the original types of *tricolor*.

Microlathra n. gen.

The few species assignable to this genus are readily distinguishable from those of *Lathrobiella* by the more parallel form, uniformly pale coloration, larger subpyriform head, with very small eyes and a general habitus which strongly recalls

Lathrobioma of the non-plicate series. It is probable that both of the known species are found with ants, at least at certain seasons, for a specimen of *pallidula*, given me by the late Mr. Jülich, was said to have been taken by him in an ant's nest. The degree of intimacy between various beetles and ants of course varies greatly, and, in many Staphylinids, such as those under discussion, there is but little evidence of true symbiosis, or it may be said at least, that the degree of association has not been carried sufficiently far to have modified their structure to any noticeable extent. The eyes, it is true, are unusually small, but they are perfectly formed and probably perform the full function of eyes as in other genera. The two species in my cabinet may be briefly described as follows: —

Form slender, parallel, pale testaceous throughout, polished; head as long as wide, very slightly enlarged toward base, the sides broadly arcuate; angles broadly rounded, the punctures not very coarse, sparse; eyes at fully three times their own length from the base; antennae rather thick, slightly longer than the head and prothorax, gradually and distinctly incrassate, the medial joints less than one-half longer than wide; prothorax somewhat narrower than the head, longer than wide, the sides very feebly converging from the distinct apical angles, sometimes broadly and feebly sinuate anteriorly, the basal angles rounded, the punctures fine, very sparse and feeble, sparsely subserial along the median smooth area; elytra slightly shorter than wide in the male and but little longer in the female, distinctly shorter than the prothorax in both sexes and obviously wider, the sides straight and strongly diverging, the punctures very fine, sparse and feeble, obscurely subserial in arrangement; abdomen at base as wide as the elytra or nearly so, distinctly wider posteriorly, finely, not densely punctulate and somewhat shining. Male with the fifth ventral wholly unmodified, the sixth broadly obtuse at tip, with a small simple subtriangular and gradually formed emargination, three times as wide as deep and a third as wide as the apex, the lobes of the latter broadly, feebly rounded; female with the sixth ventral evenly and strongly rounded at tip. Length 4.1 mm.; width 0.68 mm. Massachusetts (Lowell) and New York (Staten Island..**pallidula** Lec.

Form still more slender, with smaller head and prothorax and much larger elytra; coloration and lustre similar; head fully as long as wide, rather finely, moderately sparsely punctate, broadening slightly toward base, the sides broadly arcuate, the angles widely rounded; eyes at three times their length from the base; antennae extending to basal third of the elytra, nearly as in *pallidula;* prothorax elongate, equal in width to the head, parallel, the sides very feebly arcuate; anterior angles distinct, the posterior narrowly rounded; punctures fine, feeble and very sparse, forming a widely-set series along the median smooth space; elytra subparallel, distinctly longer than wide, a fourth longer and fully a fourth wider than the prothorax, the punctures small and sparse but arranged in widely and feebly impressed series; abdomen distinctly narrower than the elytra, subparallel, finely, not densely punctulate. Male unknown; female with the sixth ventral evenly and rather strongly rounded behind. Length 4.1 mm.; width 0.66 mm. Pennsylvania..**rutilans** n. sp.

Neither of these species seems to be at all common and I have but four examples altogether.

Dacnochilus Lec.

The general habitus of this genus is similar to that of *Linolathra* and the coloration of the body also reminds us of the small slender species so named above. There are many structural features, also, that prove the very close relationship existing between the two genera, such as the hind tarsi, gular sutures and disposition of the elytral punctures. *Dacnochilus* differs especially in the form of the labrum, in the short obtrapezoidal form of the prothorax and presence of long stiff tactile setae bristling at the sides of the body — so greatly developed in *Acalophaena*. We have, as far as known, but a single species as described below: —

Form slender, convex and parallel, polished, pale testaceous throughout, except about basal half of the elytra, which is abruptly black; head well developed, wider than long, with a few coarse impressed punctures near the sides, the latter feebly diverging behind the eyes and slightly arcuate, the angles narrowly rounded; eyes large, prominent, at about a third more than their own length from the base; antennae distinctly longer than the head and prothorax, rather slender basally but gradually strongly incrassate distally, the medial joints less than one-half longer than wide; prothorax obtrapezoidal, distinctly wider than long, equal in width to the head, the sides very feebly arcuate, the anterior angles narrowly rounded, the basal more broadly, the punctures rather small, very widely scattered toward the sides anteriorly and widely spaced in a single series at each side of the median smooth area, elsewhere wanting; elytra not quite as long as wide, parallel, the sides feebly arcuate posteriorly, slightly wider and longer than the prothorax, the punctures fine and feeble, widely spaced in a very few widely separated series, each puncture bearing a stiff hair; abdomen behind the middle as wide as the elytra, slightly narrower at base, finely, very sparsely punctulate and polished. Male with the fifth ventral unmodified, except a small and very feeble sinuation at the middle of the apex; sixth narrow, with a circularly rounded apical sinus, four or five times as wide as deep and half as wide as the apex, the edge finely beveled, the surface conically and moderately impressed along the middle before the sinus, the impression not abruptly formed and glabrous; female with the sixth ventral conical, transversely sinuato-truncate at tip. Length 5.5 mm.; width 0.85 mm. Texas (Galveston) .... **laetus** Lec.

Other species of this genus occur in Mexico. The pleural fold of the elytra characterizing the preceding genera appears to be wholly obsolete in *Dacnochilus*, but the fine carina delimiting the epipleurae proper is well developed. In *Acalophaena* there is a feeble vestige of the pleural fold posteriorly.

Acalophaena Shp.

This remarkable genus, although evidently related to *Dacnochilus*, is much more highly specialized. The body is singularly compact longitudinally, broadly convex, with a relatively narrower neck than in *Dacnochilus* and with the abdomen densely punctulate, in striking contrast to that genus; the antennal joints are less narrowed toward base than usual or may be said to be almost subcylindric and the basal joint is not of the usually elongate cylindrical form, but is shorter and strongly compressed. Our only species known to me is the following: —

Form very broad, convex, polished, bristling with long setae at the sides, pale testaceous throughout, except the abdomen, which is infuscate; head very transverse, trapezoidal, the sides strongly diverging to the narrowly rounded basal angles and almost straight; base very broad, truncate; eyes rather small, not prominent, at nearly twice their own length from the base, the punctures wholly wanting, except a few, small in size, sparsely scattered at the extreme sides; antennae very slender, only slightly incrassate, rather compact, as long as the head and prothorax, the latter not quite twice as wide as long, the sides slightly converging from apex to base and evenly arcuate; anterior angles distinct, the posterior broadly rounded; base and apex truncate; surface wholly sculptureless, except a few small punctures near the side margins, especially anteriorly; elytra two-thirds wider than long, the sides straight, slightly diverging at apex, slightly wider than the prothorax and nearly two-fifths longer; suture not beaded; surface not impressed along the suture, wholly sculptureless, except a few small punctures serially arranged at the extreme sides; abdomen short and broad, as wide as the elytra, the sides converging rapidly from base to apex and broadly arcuate; segments very short; surface finely, densely punctulate and dull. Male unknown; female with the sixth ventral narrow, transversely truncate at tip. Length (contracted) 3.2 mm.; width 1.0 mm. Arizona. **compacta** n. sp.

There are other species of this genus in northern Mexico* but I do not know of any additional from our own territories. *Acalophaena* was proposed by Dr. Sharp as a substitute for the preoccupied name *Calophaena* Arrib., (Bol. Acad. Nac., vii, p. 270), founded upon the Argentine *basalis* Arrib. The Mexican *angularis* Er. and the South American *polita*, *pagana*, *germana* and *picta*, of Sharp, included by Dr. Sharp, differ greatly from the two species here described in their slender form and relatively broader neck, and it is probable that they will prove to be generically different. It is a remarkable fact that *compacta* and *horridula* agree much more closely with *basalis* — the type of the genus — than those just mentioned. The very short compact form and unusual facies of *compacta* and *horridula*, would seem to indicate some specialized or restricted life habits, such for example as a termitophilous symbiosis, which is also ascribed by Arribálzaga to the typical *basalis*, while *angularis* and the others allied thereto, probably have habits not differing in any way from those of *Dacnochilus*.

LITHOCHARES.

The densely punctulate and dull sculpture, together with certain habital features of this subtribe, gives to the species a superficial similarity to the Medones — so much so that the genus *Lithocharis* has been included by Heyden, Reitter and

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* One of these may be described as follows: —

Form and structure throughout as in *compacta* but larger, pale testaceous throughout, except the head and elytra which are black, the apex of the latter very narrowly — but more broadly toward the sides — testaceous; sculpture and tactile setae similar to those of *compacta*, the abdominal punctulation less dense and with the surface shining, each segment with a transverse median series of erect stiff setae not evident in *compacta*. Length. 44 mm.; width 1.2 mm. Mexico (Vera Cruz) ..... **horridual** n. sp.

Weise as a subgenus of *Medon.* They differ radically from the Medones, however, in the structure of the prosternum under the coxae, this sclerite ending posteriorly in an acute free point, coming far from attaining the mesosternum and formed as in the Lathrobia. The labrum, also, differs from anything known in the Medones and in fact is subtribally distinctive, for, although in several other subtribes, such as the Paederi and Medones, we occasionally observe a short sharp denticle at the bottom of the median emargination, there is no other group in which the median tooth becomes the most conspicuous feature or formed as it is here. In short, the distinctive character of the labrum in the Lithochares is a median tooth, without trace of lateral denticulation, while in the Medones it is the development of lateral teeth and absence of anything but a rarely observable and wholly different medial denticle. The Lithochares agree with the Medones, however, in having the anterior tarsi either dilated or undilated, departing from the uniformly dilated condition of the Lathrobia. We have but two genera as follows:—

Form rather stout, parallel, larger in size, moderately convex, finely, densely sculptured and dull in lustre; head oblong, well developed, broadly sinuato-truncate at base; eyes moderately large, not very prominent; labrum well developed, broadly arcuato-truncate, with a short, obtuse and dorsally swollen median tooth, not projecting beyond the general line of the apex and bordered at each side by a small emargination; gular sutures well separated anteriorly, gradually converging and most approximate and narrowly separated at the base; ligula densely fimbriate at tip with broad obtuse strigose and submembranous spicules; paraglossae compressed; labial palpi slender and elongate; maxillary palpi slender, elongate, the third joint elongate-oval, with the apical cavity small, the fourth joint very slender and aciculate, not very oblique; antennae slender, filiform, moderate in length, the joints obconical; neck barely two-fifths as wide as the head; prothorax obtrapezoidal, broadly produced in the middle at apex, truncate at the neck; prosternum short before the coxae; elytra well developed, longer and wider than the prothorax; abdomen with the segments only feebly impressed at base; legs slender, the anterior tarsi moderately dilated, densely padded beneath, the posterior three-fourths as long as the tibiae, with the first joint much longer than the second and subequal to the fifth, nearly as in *Dolicaon.* America.. **Aderocharis**

Form rather more slender, less parallel, the head small, finely, densely dull in sculpture throughout; head broadly arcuato-truncate at base, the eyes large and conspicuous; labrum as in *Aderocharis* but with the sinuation at each side of the median tooth broader and feebler; antennae, gular sutures and palpi similar; ligula densely fimbriate at tip with about six stout membranous spicules; neck scarcely more than a third as wide as the head; prothorax subquadrate; prosternum rather short; elytra large and well developed; abdomen narrower, the segments narrowly and feebly impressed at base; legs slender, the anterior tarsi not dilated, the posterior slender and shorter, the first joint only slightly longer than the second, equal to the fifth, the first four decreasing uniformly in length. Cosmopolitan. [= *Metaxyodonta* Csy.]. **Lithocharis**

The known species of these genera are comparatively few in number.

Aderocharis Shp.

This genus is rather well represented in Mexico by several species, but only one occurs widely distributed within our territories as follows: —

Body broad, parallel, only very moderately convex, dark red-brown in color throughout, the head black or blackish; surface throughout rendered very dull in lustre by fine, densely placed but not confluent punctures, which are granuliform on the elytra; head not quite as long as wide, parallel, the sides feebly arcuate, the angles rather narrowly rounded; eyes at nearly twice their length from the base; antennae scarcely as long as the head and prothorax, the latter not quite as wide as the head, slightly wider than long, with the sides distinctly converging from the very distinct apical, to the broadly rounded basal, angles, and straight; median impunctate line very fine but entire; elytra quadrate, parallel, a fourth wider and longer than the prothorax; abdomen parallel, nearly as wide as the elytra. Male with the fifth ventral just visibly sinuate toward the middle of the apex, the sixth broad, angularly emarginate throughout its entire width at apex, the emargination some seven times as wide as deep, with the angle only slightly rounded; seventh unusually developed, finely, longitudinally slit beneath nearly throughout its length; female with the sixth ventral rather narrowly and strongly rounded at tip. Length 6.5 mm.; width 1.3 mm. Pennsylvania, Virginia, North Carolina (Asheville), and Iowa.. **corticina** Grav.

This species is moderately abundant and displays little or no variability.

Lithocharis Lac.

The species of this genus are but few in number, and, in several instances, cosmopolitan in distribution, being probably continually transported in articles of commerce, as there is no variation, even of a varietal nature, to denote long establishment in any particular locality, but, whether originating in America or Europe, is a question not yet solved; the probabilities are that the genus was originally exclusively American. The three species in my cabinet may be readily known as follows from the male: —

Male with a fringe of short black spinules in median third of the fifth ventral. Body moderately slender, subfusiform, feebly convex, pale brown throughout and dull in lustre, the head black; punctures fine and extremely close-set, subgranuliform on the elytra; head rather wider than long, subparallel at the sides, the angles rather broadly rounded; eyes at not quite their own length from the base; antennae somewhat longer than the head and prothorax, the latter slightly wider than the head, a little wider than long, the sides parallel and feebly arcuate; base and apex broadly, equally and subevenly arcuate, the angles obtuse but only slightly rounded; median smooth line obsolete; elytra quadrate, parallel, two-fifths wider and longer than the prothorax; abdomen parallel with the sides broadly arcuate, narrower than the elytra throughout. Male with a large subparabolic emargination, much wider than deep, occupying the entire width of the sixth ventral, the surface along each side of the sinus broadly, feebly impressed and bearing a dense tuft of long pale hairs; apex of the fifth transversely truncate, the spinules in median third turned inward. Length 3.7 mm.; width 0.7 mm. America (from the Atlantic to the Pacific) and Europe. [= *Metaxyodonta alutacea* and *quadricollis* Csy.].
ochracea Grav.

Male without trace of median spinules at the apex of the fifth ventral.. 2

2 — Form similar to *ochracea*, the size somewhat smaller; coloration, lustre and sculpture similar; head similar to that of *ochracea*, the eyes large and at distinctly less than their own length from the base; gular sutures similarly strongly impressed but rather less approximate, being well separated; prothorax equal in width to the head, similar in form to that of *ochracea*; elytra large, quadrate, parallel, two-fifths wider and longer than the prothorax; abdomen arcuate at the sides behind the middle, scarcely narrower than the elytra. Male with the fifth ventral very feebly sinuate toward the middle of the apex; sixth with a large parabolic sinus, wider than deep, occupying the entire width, the surface at the sides not impressed, the lateral edges of the sinus bristling with very long close-set hairs. Length 2.9 mm.; width 0.62 mm. Southern California, — Mr. Fall............**simplex** n. sp.

Form more slender, the size still smaller, darker and more piceous in color with the head black, but similarly dull in lustre and densely punctulate; head fully as long as wide, parallel and nearly straight at the sides, the angles similarly moderately rounded; eyes much smaller, at distinctly more than their own length from the base; antennae more slender and much shorter, not as long as the head and prothorax;

gular sutures less impressed, more approximate toward base; prothorax differing greatly in form, about as long as wide, the sides feebly converging from the base to the apex and slightly arcuate; apex more strongly arcuate than the base, the apical angles very obtuse and rounded, a little wider than the head; elytra slightly longer than wide, subparallel, two-fifths wider and nearly one-half longer than the prothorax, paler at the sides than on the disk; abdomen distinctly narrower than the elytra throughout. Male with the fifth ventral truncate at apex and unmodified, the sixth much narrower, rectilinearly truncate at tip and otherwise unmodified. Length 2.7 mm.; width 0.6 mm. Arizona.................................... **sonorica** n. sp.

The female in both *ochracea* and *simplex* has the apex of the sixth ventral broadly angulate, with the angle more or less rounded. The single specimen of *sonorica* before me has the apex of the sixth ventral truncate, and, as the sexual modifications are so simple, it may in reality be a female, but in any event it is a remarkably distinct species. The concealed ligula of the seventh ventral in *Lithocharis*, is spatuliform, narrowed toward tip, and densely clothed with silvery pubescence.

The Henshaw catalogue (3rd suppl., p. 10) lists a *Lithocharis debilis* Woll. I have been unable to find any such species described. The *debilis* of Erichson (Gen., p. 625) inhabits Colombia and the description does not correspond with any of our species as given above.

MEDONES.

The multitude of small species of more or less monotonous appearance, composing this group, are rather difficult to classify in a satisfactory manner, owing to the fact that the male sexual characters are usually simple and but slightly varied; the genus *Paramedon*, however, offers a very welcome exception in this regard. The group is much more highly developed in America than in Europe, comprising the following nineteen genera within the limits of the United States, only two of which — *Neomedon* and *Sciocharis* — are certainly known to extend for any great distance into Mexico: —

Gular sutures completely fused, forming a single coarse suture from the angulate post-mental piece to the base.............................. 2

Gular sutures always separated, sometimes very feebly impressed and occasionally altogether effaced and traceable only by differences in sculpture between the intersutural region and the remainder of the under surface of the head 3

2 — Labrum short and very broad, truncate, broadly, feebly sinuate at the middle and having six very small teeth or tooth-like undulations; species very large in size for the present group; paraglossae coarsely and angularly bilobed; palpi normal, the third joint of the maxillary fully a third longer than the second; eyes moderate; antennae rather thick, filiform, the third joint very much longer than the second; prosternum feebly and obtusely carinate posteriorly; tarsi moderately slender, the basal joint of the posterior distinctly longer than the second, the anterior distinctly dilated and spongy beneath in both sexes; integuments shining, simply and rather coarsely punctate, the neck one-half as wide as the head; male ventral characters very slight. Sonoran..**Neomedon** 155

Labrum narrower, more rounded, with four acute and well developed teeth and a small median notch, which is acutely denticulate at the bottom; species moderate in size; paraglossae of the usual form, acutely bilobed; ligula setose at tip; eyes rather small; palpi normal; antennae rather thick, filiform, the third joint only slightly longer than the second; prosternum acutely carinate posteriorly; tarsi rather short and thick, the basal joint of the posterior much longer than the second, the anterior thickened but scarcely dilated; integuments very densely dull, the sculpture rather coarse and extremely dense; neck rather narrow, from rather more than a third to two-fifths as wide as the head; male unknown. Sonoran ....**Polymedon** 156

3 — Labrum bidentate 4

Labrum quadridentate 13

Labrum without teeth, though having the usual small median notch......18

4 — Antennae with the two basal joints normally thick, the remainder very slender, filiform and verticillate; labral teeth small but distinct and approximate, the notch small; species generally dull in luster, with close fine sculpture 5

Antennae normal, equally or subequally thick throughout, sometimes feebly enlarged toward tip 6

5 — Gular sutures moderately separated, gradually converging and most narrowly separated toward base; eyes more or less well developed, the neck rather broad but usually less than half as wide as the head; prosternum not carinate except posteriorly; tarsi moderately short and somewhat thick, the basal joint of the posterior distinctly longer than the second, two to four decreasing in length, the anterior more or less distinctly dilated; species very numerous, small in size, always rather distinctly punctured, the male sexual characters simple, the fifth segment scarcely modified. South America to the warmer parts of North America ....**Sciocharis** 157

Gular sutures very widely separated and most approximate anteriorly, thence widely diverging to the base of the head; eyes rather small; neck nearly half as wide as the head; prosternum not at all carinate; tarsi short and moderately thick, the first joint of the posterior distinctly longer than the second, two to four equal and about as long as wide, the anterior not in the least dilated or thickened; species very minute, not distinctly punctured; male sexual characters nearly as in *Sciocharis*, except that the apex of the fifth segment is lobed in the middle. Southern Atlantic States........................**Sciocharella** 158

6 — Labral teeth small and inconspicuous; prosternum never carinate throughout its length except in a few abnormal members of *Medon*.. 7

Labral teeth long, acute and very conspicuous; prosternum carinate throughout its length; gular sutures converging and most narrowly separated basally..12

7 — Basal joint of the posterior tarsi equal in length to the second, the first four short and subequal, the anterior very slightly dilated; palpi normal; gular sutures rather narrowly separated, evenly, feebly arcuate, very rapidly diverging at base, most narrowly separated at a little before the middle; antennae rather thick, gradually enlarged distally, the third joint distinctly longer than the second; eyes moderate; neck about half as wide as the head; prosternum not at all carinate at any point; integuments very coarsely, densely sculptured and dull, the species small in size. Nearctic regions, east of the Rocky Mountains. **Trachysectus** 159

Basal joint of the hind tarsi distinctly longer than the second, the tarsi more elongate..8

8 — Labrum with a rather broad sinus at the middle including the two teeth, which are very small and not as anteriorly prominent as the sides of the labrum; species small, with the elytra very small, shorter and narrower than the prothorax; eyes rather small; neck two-fifths as wide as the head; gular sutures well separated and subparallel but obsolete or very feeble; antennae short, moderately thick, filiform, not enlarged distally, the basal joint thicker than the remainder; prosternum rather strongly carinate except anteriorly; posterior tarsi very slender and filiform, the anterior slightly dilated; integuments rather coarsely, densely sculptured and dull. Appalachian region.........**Hemimedon** 160

Labrum with a narrower median notch, the two teeth more advanced than the lateral parts of the edge and not included within the sinus.........9

9 — Anterior tarsi not dilated but only more or less strongly thickened; sexual characters very feeble.......................................10

Anterior tarsi strongly dilated, especially in the male; sexual characters strongly marked...11

10 — Gular sutures distant, broadly arcuate, becoming very widely divergent toward base and most narrowly separated well before the middle; species small, slender in form, polished and sparsely punctate, the elytra subequal to the prothorax in size; antennae moderately thick, somewhat enlarged distally; labrum very broadly, angularly emarginate, with a small feeble median sinus, the teeth very minute; eyes rather well developed; neck a little less than half as wide as the head; anterior tarsi spongiose beneath in both sexes; hind tarsi slender and filiform. Europe...***Hypomedon**

Gular sutures of the same form as in *Hypomedon* but subobsolete; species minute, slender, polished and sparsely, rather coarsely punctate, the elytra shorter than the prothorax; antennae normal in structure; labrum small, truncate, with a distinct rounded median sinus and two well developed aciculate teeth; eyes very small; neck barely two-fifths as wide as the head; anterior tarsi scarcely thickened, not at all spongiose beneath; hind tarsi very slender, filiform. Europe......***Micromedon**

Gular sutures more or less approximate, gradually converging and most narrowly separated near the base of the head; species small to moderately large in size, generally very finely, rather closely punctured and only moderately shining; eyes very small; antennae moderately thick, gradually enlarged distally; neck about two-fifths as wide as the head; hind tarsi moderately slender. Palaearctic and Nearctic regions..**Medon** 161

11 — Gular sutures converging and most narrowly separated basally; species small or moderate in size, of rather stout form, shining, the punctures fine and well separated; antennae as in *Medon*; eyes well developed; neck rather wide, almost half as wide as the head; prosternum only carinate at the posterior cusp; elytra larger than the prothorax; posterior tarsi moderately slender. Pacific coast regions.....**Paramedon** 166

12 — Body moderately small in size, very slender, dull in lustre but not distinctly punctate, parallel, the elytra subequal to the prothorax; gular sutures widely separated; paraglossae coarsely, angularly bilobed, the ligula simple at apex; palpi nearly normal, the second joint of the labial compressed, the fourth joint of the maxillary small; antennae moderate in length, slender, filiform, not appreciably enlarged distally, the third joint but little longer than the second, the first rather longer than the next two combined though but little thicker; eyes very small; neck unusually narrow, scarcely a third as wide as the head; prosternum strongly carinate. Sonoran.................. .....**Medonodonta** 176

Body somewhat stout and more convex, moderately large in size, polished, strongly but not densely punctured; gular sutures narrowly separated; oral organs nearly as in the preceding, the eyes well developed; antennae long, rather slender, feebly enlarged distally, the third joint distinctly longer than the second, the first somewhat elongate but not much thicker; neck two-fifths as wide as the head; elytra larger than the prothorax; hind tarsi rather longer than usual, moderately slender, the anterior noticeably dilated. Pacific coast regions......**Oxymedon** 177

13 — Gular sutures rather approximate, converging, most narrowly separated basally. Body moderately small in size, subdepressed, rather stout, subalutaceous, very finely, rather closely punctured, the elytra much larger than the prothorax; lobes of the paraglossae rather obtuse at apex; third maxillary palpal joint unusually inflated, somewhat compressed and scarcely longer than the second; antennae rather thick, feebly enlarged distally, the third joint but little longer than the second; eyes moderately developed; neck scarcely two-fifths as wide as the head; prosternum carinate; posterior tarsi short and rather thick, the first joint almost as long as the next two combined, the anterior distinctly dilated; labrum with four large and conspicuous acute teeth, the small deep rounded median notch with a minute obtuse denticle at the bottom, the structure throughout nearly as in *Polymedon*. Appalachian region.......................................**Tetramedon** 178

Gular sutures more or less widely separated, parallel or broadly arcuate, becoming more widely divergent basally..........................14

14 — Labrum with a small rounded median notch limited by the two inner

teeth, which are long, very acute and prominent, the outer teeth very minute and sometimes rather widely separated from the inner. Body moderately large in size, depressed, shining or alutaceous, the sculpture very fine; head rather small, the elytra large; outer lobe of the paraglossae longer than the inner, both pointed; third maxillary palpal joint long, rather slender and compressed; eyes rather well developed; antennae moderately long and slender, scarcely visibly enlarged distally, the joints subcylindrical; neck a little less than half as wide as the head; prosternum strongly carinate posteriorly; hind tarsi very long and slender, filiform, four-fifths as long as the tibiae, the basal joint almost as long as the next two combined; anterior tarsi slightly dilated, more distinctly in the male. Nearctic regions.....**Platymedon** 178

Labrum with the usual small median notch and four very small teeth, the latter much less unequal among themselves and frequently very difficult to perceive..15

15 — Elytra small, not longer than the prothorax; eyes small............16

Elytra well developed, always longer than the prothorax, the eyes large..17

16 — Body minute in size, polished, sparsely punctured, the gular sutures wholly obsolete and traceable only by the absence of punctures on the intervening surface; antennae short, the basal joint stout, the remainder very slender but unusually clavate distally; neck rather less than half as wide as the head; palpi short; prosternum tumid but scarcely carinate posteriorly; hind tarsi short, moderately stout, the basal joint nearly as long as the next two combined, the anterior feebly dilated. Caribbean region...**Medonella** 180

Body very small in size and of slender form, shining though rather coarsely and closely sculptured; gular sutures fine and sometimes subobsolete; antennae longer, normal, thicker, feebly enlarged distally; neck two-fifths as wide as the head; palpi longer and well developed; prosternum rather strongly carinate except anteriorly; hind tarsi longer, very slender and filiform, the basal joint distinctly shorter than the next two combined; anterior tarsi slightly thickened but not at all dilated. Pacific coast regions...................................**Oligopterus** 181

17 — Body moderate to very small in size, slender, more or less finely and closely sculptured, the gular sutures fine; head small as a rule; antennae rather short, moderately stout, filiform, scarcely thickened distally; neck two-fifths as wide as the head; prosternum strongly carinate posteriorly; hind tarsi long and very slender, filiform, the basal joint nearly as long as the next two combined, the anterior not at all dilated and but feebly thickened even in the male. Pacific coast regions. **Caloderma** 182

18 — Body moderate to small in size, rather slender, frequently dull in lustre and extremely finely, usually closely punctulate; head small, the elytra at least as long as the prothorax; palpi well developed, the lobes of the paraglossae small; mentum unusually elongate; gular sutures very fine and remotely separated, most approximate anteriorly and thence widely diverging to the base; antennae rather thick, filiform, not appreciably enlarged distally; eyes well developed; neck two-fifths as wide as the head; prosternum carinate posteriorly; hind tarsi rather short, somewhat stout, the basal joint longer than the second, the

anterior more or less strongly dilated in both sexes. Palaearctic and Nearctic regions. [= *Ramona* Csy.] .... **Pseudomedon** 187

Body minute in size, feebly, not very densely sculptured, the head and elytra larger than the prothorax; palpi well developed; gular sutures as in *Pseudomedon* but less widely separated; mentum shorter, strongly transverse; antennae short, unusually enlarged or claviform distally; eyes well developed; neck fully two-fifths as wide as the head; prosternum scarcely at all carinate; hind tarsi rather long, very slender and filiform, the basal joint distinctly shorter than the next two combined, the anterior merely thicker, not at all dilated. Regions bordering the Gulf of Mexico .... **Lena** 189

The European *Hypomedon* Rey, is included for comparison and completeness; it is undoubtedly distinct from *Medon* and not a subgenus as stated by Heyden, Reitter and Weise in the catalogue of those authors. *Micromedon* (n. gen.) is founded upon the European *Medon seminigrum*, of Fairmaire. It is more closely related to *Hypomedon* than any other genus, but differs greatly in habitus and in labral structure, as well as in its non-spongiose anterior tarsi and minute eyes.

Neomedon Shp.

The genus *Neomedon*, as outlined by Dr. Sharp in the "Biologia," has the body subdepressed, the labrum short, broad, scarcely or not at all emarginate and minutely trituberculate at each side, the first joint of the posterior tarsi one-half longer than the second and the anterior slightly dilated. In view of these characters, in connection with the comparatively large size of the species, and the fact that the genus appears to extend to the northernmost limits of the regions covered by the "Biologia," leads me to believe that the following species, from which the generic diagnosis of the above table is taken, is truly a member of the genus under consideration:—

Body stout, subdepressed, parallel, black in color, the elytra, legs and antennae more or less bright rufous, the surface distinctly shining, with the punctures of the head coarse, rounded and distinctly separated, those of the pronotum finer but almost as close-set and about equal to those of the elytra, the abdomen very minutely and densely punctulate, head large, distinctly wider than long, parallel and straight at the sides; the basal angles rather broadly rounded, the base broadly sinuate;

prothorax small, strongly obtrapezoidal with the sides straight, much wider than long and distinctly narrower than the head, the angles distinct and only moderately rounded; elytra quadrate, subequal in width to the head, the sides parallel and feebly arcuate. Length 7.5 mm.; width 1.35 mm. Arizona (Williams), — Mr. Wickham. **arizonense** n. sp.

The secondary male sexual characters are very simple, consisting of a large and broadly rounded shallow sinus at the tip of the sixth ventral segment. The species seems to be rather rare and I have only seen two specimens thus far.

Polymedon n. gen.

This genus is also represented within our limits by a single species, which is very abundant, but, rather singularly, the only sex known to me is the female and I have searched in vain for the male through the numerous specimens in my cabinet. The male sexual characters are, however, probably simple. I have not been able to indentify *Polymedon* with any of the many Mexican genera made known by Dr. Sharp, and it is probably a local type, confined to the arid parts of the Sonoran regions. The type species may be described as follows:—

Body moderately stout and convex, parallel, dark red-brown throughout, the elytra rather more rufous; integuments densely dull because of the rather coarse and mutually subcontiguous punctures, the elytra feebly shining and less densely punctate, the abdomen very minutely punctulate and also slightly shining; head moderately large but not quite as wide as the elytra, parallel and feebly arcuate at the sides, the basal angles broadly rounded; prothorax much narrower than the head and almost as long as wide, feebly obtrapezoidal, the sides straight, the angles obtusely rounded; elytra subquadrate, scarcely as long as wide, about a fourth wider than the prothorax and almost two-fifths longer, the sides parallel, feebly arcuate posteriorly. Length 4.5 mm.; width 0.9 mm. Arizona.................................**tabacinum** Csy.

The specimens at hand are from various parts of Arizona, and, in some, the head is relatively a little smaller, with the neck somewhat wider, but I can discover no other specific differences.

Sciocharis Arrib.

A part of the large collection of Staphylinidae brought back from Brazil by Mr. H. H. Smith, placed in my hands for examination some years ago, revealed a most astonishing variety in this genus and I remember mounting about twenty species; to state therefore that there are more than a hundred species within the limits of Brazil alone, ought to be a very conservative estimate. *Sciocharis* is probably equally well represented throughout Central America and Mexico, so that it may be said to be one of the largest — possibly the largest — genus of American Paederini. In the United States of America, it is represented, as far as known to me at present, by the three following species, the first of which belongs more properly to the fauna of Mexico: —

Second antennal joint much thicker but not longer than the third; punctures much finer, dense, the lustre dull; body rather stout, subdepressed, parallel, pale flavo-testaceous throughout, the head but little darker, the elytra with a large feeble piceous cloud, not extending to the sides, base or apex; head well developed, wider than long, parallel at the sides, the eyes at but little more than their own length from the base, the angles rather narrowly rounded; prothorax distinctly narrower than the head and wider than long, somewhat strongly obtrapezoidal with the sides straight, the angles very narrowly rounded and distinct, the basal broadly rounded; elytra quadrate, parallel, a fourth wider and nearly one-half longer than the prothorax and slightly wider than the head. Male not known. Length 3.0 mm.; width 0.75 mm. Texas (Brownsville), — Mr. Wickham.............................. **nubipennis** n. sp.

Second antennal joint much longer, as well as thicker, than the third; punctures of the head and pronotum stronger...................... 2

2 — Color pale brown throughout, the head slightly darker, piceous; lustre dull; body parallel, moderately convex, the head well developed, as wide as the elytra, parallel and feebly arcuate at the sides, the eyes at nearly twice their own length from the base, the angles moderately rounded; prothorax distinctly obtrapezoidal, well developed, nearly as wide as the head, wider than long, the sides nearly straight, all the angles broadly rounded; elytra quadrate, parallel, about a sixth wider and a third longer than the prothorax. Length 3.0 mm.; width 0.65 mm. North Carolina (Asheville) and District of Columbia. **carolinensis** n. sp.

Color blackish, the abdomen piceous, the legs dark brown and the antennae still paler; lustre alutaceous, the punctures dense; body subparallel, moderately convex, the head moderately developed, wider than long but distinctly narrower than the elytra, parallel and straight at the sides, the angles right and only slightly rounded; eyes still rather smaller, somewhat convex, at twice their own length from the base; prothorax less developed, wider than long, a little narrower than the head, feebly obtrapezoidal, with all the angles broadly rounded; elytra quadrate, a fourth wider and two-fifths longer than the prothorax. Length 2.75 mm.; width 0.65 mm. Mississippi (Vicksburg).......**congruens** n. sp.

Both *carolinensis* and *congruens* are described from the male, in which sex the hind margin of the fifth ventral is transverse, becoming just visibly bisinuate at the middle, and the sixth has at the apex a broad notch, in the form of an incised cusp, with its sides rapidly flaring outward and arcuate, the point of the notch narrowly obtuse. In *congruens* the sides of the notch flare still more widely and the incisure is therefore relatively shallower than in *carolinensis*. The punctures of the head are rather irregular in form and deep, the narrow interspaces having some very minute scattered punctules which appear to bear the visible pubescence. The punctures of the pronotum, and, to some extent, of the elytra, are also peculiar, smaller than those of the head and equally close-set but circular, slightly elevated and bearing each a centrally placed hair. Although so generally distributed over the American continents, *Sciocharis* has not yet occurred in the regions bordering the Pacific Ocean.

Sciocharella n. gen.

The remarkable antennae characterizing this and the preceding genus are unlike anything else in the tribe and thoroughly isolate them. The present genus greatly resembles *Sciocharis*, though composed of much more minute species, but differs very radically in the form of the gular sutures and smaller eyes, as well as in its undilated anterior tarsi. The only species known to me at present is the following:—

Parallel, slender, moderately convex, alutaceous, pale flavo-testaceous throughout, except the head, which is piceous; punctures of the head and pronotum not distinct, very minute, of the elytra extremely minute, rather sparse; head nearly as long as wide, a little wider at base than across the slightly convex eyes, which are situated at rather more than twice their own length from the base; sides almost perfectly straight, the angles somewhat obtuse but scarcely at all rounded; second antennal joint almost as long as the next two combined and much thicker, prothorax almost as long as wide, scarcely narrower than the head, but just visibly narrower at base than at apex, the sides nearly straight, the angles scarcely at all rounded; elytra quadrate, parallel, much wider than the head, a fifth wider and one-fourth longer than the prothorax. Length 1.75 mm.; width 0.33 mm. Alabama. **delicatula** n. sp.

The male sexual modification of the sixth ventral is very nearly as in *Sciocharis*, being obtusely cuspidiform, with widely flaring arcuate sides of the emargination, but the apical margin of the fifth segment has a broadly rounded coplanar lobe, about a seventh as wide as the segment, projecting from the middle, which lobe is suggested by the very feeble bisinuation of the edge in some forms of *Sciocharis*. Other species of this interesting genus will doubtless be discovered in the course of careful collecting.

Trachysectus Csy.

This genus also has but a single known species, which is widely distributed throughout the colder parts of the North American continent, east of the Rocky Mountains. It may be readily known by its coarse and confluent sculpture and short tarsi, the first four joints of the posterior equal and the anterior slightly dilated: —

Rather stout, parallel, moderately convex, blackish-piceous, the elytra — rather broadly at tip, — antennae toward base and legs, rufous; prothorax also generally rufescent; surface feebly shining, densely sculptured, the head coarsely, with the punctures elongated by compression, the pronotum longitudinally rugose, the hairs borne from the minute graniform punctules along the middle of the depressions or at the middle of the cephalic punctures, the punctures of the elytra sparser and smaller, asperate, of the abdomen extremely minute; head well developed, as wide as the elytra, a little wider than long, parallel and straight at the sides, the angles broadly rounded; eyes moderately developed, convex; prothorax much narrower than the head, obtrapezoidal, wider than long, the anterior angles obtuse but only slightly rounded; elytra quadrate, parallel, a fifth wider and two-fifths longer than the prothorax. Length 3.5 mm.; width 0.8 mm. Rhode Island and Virginia to Iowa and Minnesota.................. **confluens** Say

The male has very simple sexual characters, the fifth segment being unmodified and the sixth having a small triangular median emargination. The under surface of the head is as coarsely and densely sculptured as the upper and the gular sutures are rendered conspicuous by reason of the fact that the narrow space between them is highly polished, sculptureless and concave, gradually broadening near the base. The name *confluens* is an Erichsonian emendation of the originally published "*confluenta*" of Say, (= *Lathrobium confluentum*).

Hemimedon n. gen.

In general appearance the species of *Hemimedon* strikingly resemble the Pacific coast *Oligopterus*, but the likeness is in great part superficial, as shown by the generic characters of the table, the labrum being quite different in structure. The genus appears to be very circumscribed in habitat, and, so far as known, limited in range to the more southern parts of the Appalachian mountain system. The two species before me are mutually as closely allied as those of *Oligopterus*, but may possibly be recognized by the following characters: —

Stouter in form and parallel, feebly shining, blackish-piceous, the abdomen black, the legs and antennae dark rufous; head well developed but distinctly narrower than the prothorax, slightly wider than long, the sides parallel and straight, the angles rather narrowly rounded; eyes at rather more than twice their own length from the base; punctures rather coarse and moderately dense; prothorax large and distinctly obtrapezoidal, the sides broadly, feebly arcuate, the angles well rounded, the punctures finer than those of the head, well separated, the sculpture tending toward longitudinal rugulation; elytra small, slightly narrower than the head, much shorter than wide and much narrower and very much shorter than the prothorax, the sides rather strongly diverging from base to apex, the surface finely but strongly, rather closely and asperately punctate. Length 3.1 mm.; width 0.55 mm. North Carolina (Highlands) and Virginia (Pennington Gap)........................**rufipes** n. sp.

Slender in form but similar in coloration and lustre to *rufipes*, the punctures of the head and pronotum less coarse and rather sparser, those of the latter notably feeble, of the elytra somewhat finer and denser but of the same character; head as long as wide, rather distinctly narrower than the prothorax, otherwise as in *rufipes;* prothorax much smaller, nearly as long as wide, only just visibly obtrapezoidal, the sides feebly arcuate and the angles rounded; elytra similar to those of *rufipes*, except that they are transverse, only very slightly narrower than the prothorax though much shorter. Length 3.2 mm.; width 0.45 mm. Virginia, — Mr. Ulke.................................... **angustum** n. sp.

The gular sutures are widely separated, most narrowly so well to the front, rapidly diverging toward base and are generally subobliterated. The male sexual characters are feeble, the fifth ventral segment unmodified, the sixth having a rounded apical sinuation occupying almost the entire tip, rather more than three times as wide as deep, with the edge of the sinus concavely beveled, gradually more broadly so around the bottom of the sinuation.

Medon Steph.

As far as known at present, the genus *Medon* is confined to the western part of the continent, with the exception of the very small *texanum*, which occurs in Texas and *americanum*, which appears to inhabit the Atlantic slope exclusively. The west coast species are much larger than the European *fusculum* and are generally very finely punctate, sometimes densely so and dull in lustre, while in the eastern *americanum*, the sculpture is comparatively coarse, much as in the palaearctic species mentioned.* The species are far less numerous than those of *Paramedon*, which largely replaces the European genus in America, and those before me may be recognized by the characters outlined in the following table: —

Elytra small, nearly as in *fusculum*, never materially larger than the prothorax; eyes very small; species confined to the Pacific coast regions..2
Elytra large, notably larger than the prothorax; species distributed throughout the United States, frequently associated with ants............... 8
2 — Body pale, castaneous or testaceous in color........................ 3
Body black or blackish, the under surface of the head concolorous...... 6

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* I have adopted the neuter ending for specific names in this and allied genera for the sake of constancy and uniform law in scientific nomenclature, holding that all generic names ending in *m* or *n* should require the neuter ending, in conformity with the general rule of the Latin language, and, in like manner, that all names ending in *is* or *a* should be feminine and all in *os* or *us* masculine, not even excepting such a name as *Venus*. In other words it is the form of the word which should be considered, when used as a generic symbol, and not its meaning in the original tongue.

3 — Gular sutures gradually converging as usual, but remaining well separated toward the base of the head.. 4

Gular sutures becoming so nearly fused as to be inseparable with certainty toward the base of the head.. 5

4 — Body very slender, pale testaceous, rather shining, the head very large as usual, nearly as long as wide, much wider than the prothorax, distinctly wider toward base than across the very small anterior eyes, the sides broadly arcuate and the basal angles widely rounded; punctures small but strong and close-set; prothorax distinctly obtrapezoidal, somewhat wider than long, the angles rounded and the sides very feebly sinuate toward the middle, more finely and sparsely punctured than the head; elytra small, quadrate, only very slightly wider and longer than the prothorax, rather closely and rugosely punctate; under surface of the head pale rufous, convex, shining, finely and sparsely punctate, the gular sutures strongly impressed and distinct. Male unknown. Length 4.5 mm.; width 0.75 mm. California (Hoopa Val., Humboldt Co.). **sinuatocolle** Csy.

Body much less slender and more depressed, dark testaceous in color throughout and rather less shining, the head relatively not so large, wider than long, the eyes more prominent and the sides behind them more nearly parallel and feebly arcuate, the width subbasally scarcely perceptibly greater than across the eyes, the angles broadly rounded; punctures finer, rather close-set; prothorax nearly as in *sinuatocolle* but without visible sinuation at the sides and less markedly narrower than the head; elytra distinctly longer, quadrate, a fifth or sixth wider than the prothorax and nearly a third longer, similarly punctate; under surface of the head rather strongly and closely punctate, the gular sutures less impressed and with the intervening space longitudinally impressed toward base. Sinus at the middle of the sixth male ventral of the usual form, deep and broadly rounded at the bottom. Length 4.5 mm.; width 0.85 mm. Idaho (Coeur d'Alène), — Mr. Wickham. **helenae** n. sp.

5 — Body moderately slender, larger in size and less depressed, dark castaneous in color throughout, slightly dull in lustre, the punctures — particularly of the head — being close-set; head large, not swollen at base, the sides behind the small and anterior eyes being parallel and broadly, evenly arcuate; basal angles only moderately broadly rounded; prothorax much narrower than the head, wider than long, obtrapezoidal with the sides nearly straight, the angles rounded; elytra small, quadrate, only very slightly wider, though obviously longer, than the prothorax and distinctly narrower than the head; under surface of the head rather strongly, moderately closely punctate, pale in color, the double gular suture deeply impressed. Male sexual characters of the usual form, the semicircular notch of the sixth ventral moderately large. Length 4.7 mm.; width 0.8 mm. California (Sta. Clara Co.)..**lepidum** Csy.

Body rather stout, somewhat depressed, parallel, dark castaneo-testaceous in color throughout and moderately shining; head moderately large, wider than long, inflated toward base, where it becomes much wider than across the eyes, the basal angles broadly rounded; punctures fine but strong, close-set, the interspaces more polished and less dull or minutely reticulated than in *lepidum;* prothorax more finely and a little less closely punctured, obtrapezoidal with the sides straight, wider than long and distinctly narrower than the head, the angles rounded; elytra quadrate, somewhat wider and distinctly longer than the prothorax, subequal in width to the head; under surface of the latter convex, finely, rather sparsely punctate, the double gular suture toward base only feebly impressed. Sinus of the sixth ventral a little larger and relatively broader than in *lepidum*, broadly rounded. Length 4.4 mm.; width 0.8 mm. California (Lake Tahoe).........**lacustre** n. sp.

6 — Head very large, much wider than the elytra, fully as long as wide, finely, strongly and closely punctate, the sides behind the eyes feebly arcuate to the rounded basal angles, the width just before the latter a little greater than across the very small and anterior eyes; prothorax well developed, much narrower than the head, distinctly wider than long, obtrapezoidal with the sides nearly straight, the angles rounded, the punctures finer and much sparser than those of the head; elytra notably small, not as long as wide, scarcely visibly wider and only very little longer than the prothorax, about four-fifths as wide as the head, distinctly wider at apex than at base; under surface of the head shining, finely, more sparsely punctate; gular sutures very approximate, converging to the base and well impressed. Notch of the sixth ventral of the usual form in circular arc; fifth segment with some stiff black bristles arranged transversely on the disk near the apex, the single series rather widely interrupted at the middle, the apical margin truncate, just visibly sinuate at the middle. Length 3.9 mm.; width 0.68 mm. California (Sonoma and San Mateo Cos.).......**convergens** Csy.

Head large but smaller than in *convergens* and only slightly wider than the elytra; body black or piceous-black throughout, the legs and antennae rufous.. 7

7 — Prothorax as in *convergens*, distinctly wider than long, obtrapezoidal in form with the sides straight and the angles only moderately rounded; head rather wider than long, moderately inflated and broadly arcuate at the sides behind the very small eyes, distinctly wider before the broadly rounded basal angles than across the eyes; elytra not quite as long as wide, a little wider at apex than at base, distinctly wider and longer than the prothorax but obviously narrower than the head; under surface of the latter finely, sparsely punctate, the gular sutures impressed, converging very gradually and very approximate. Sexual characters of the venter nearly as in *convergens*, the notch of the sixth segment circularly rounded, not quite half as wide as the segmental apex and about three times as wide as deep. Length 4.2 mm.; width 0.72 mm. Vancouver Island (Victoria), — Mr. Wickham..............**insulare** n. sp.

Prothorax much narrower, only just visibly wider than long, with the angles broadly rounded and the sides but feebly converging from apex to base, both the head and prothorax minutely and unusually strongly reticulated and dull, the former finely and feebly but closely, the latter more finely and less closely, punctate; head narrower, as long as wide, not inflated basally, the long sides behind the eyes parallel and almost straight, the angles moderately broadly rounded; elytra about as long as wide, nearly parallel, the sides straight, subequal in width to the head, a fifth wider and nearly a third longer than the prothorax; under surface of the head finely and rather closely punctate, the sutures as in the two preceding species. Sexual characters of the venter of the usual form, the inclined bristles of the fifth segment not arranged in a regular transverse series near the apical margin, the notch of the sixth circularly rounded, abruptly defined and rather more than three times as wide as deep. Length 4.7 mm.; width 0.72 mm. California (Lake Co.)..**puberulum** Csy.

8 — Eyes very small, always at much more than twice their own length from the base of the head.. 9

Eyes well developed, at scarcely more than twice their own length from the base; species very small...13

9 — Sculpture coarse and close-set. Atlantic regions.....................10

Sculpture very fine, the lustre alutaceous; species large. Rocky Mts....11

10 — Body moderately slender, parallel, dull in lustre, pale red-brown throughout, the legs and antennae concolorous; head as long as wide, not inflated at base, the sides behind the eyes parallel and nearly straight, the angles well rounded, the punctures rather coarse and dense; prothorax distinctly obtrapezoidal with the sides nearly straight, obviously wider than long, slightly narrower than the head and with equally close-set but rather less coarse, rugulose punctuation, which partially obliterates the smooth median line, the angles rather narrowly rounded; elytra somewhat longer than wide, wider than the head, a fourth wider and three-fifths longer than the prothorax, the sides parallel and nearly straight; under surface of the head with the usual reniform punctures densely placed, the gular sutures very fine, not impressed, approximate and gradually converging to the base. Male not known. Length 4.2 mm.; width 0.72 mm. Pennsylvania.
americanum n. sp.

11 — Prosternum as usual, not carinate except posteriorly between the coxae; body rather stout, pale ochreo-testaceous throughout and dull in lustre, the punctures very minute and close-set throughout but rather more visible on the elytra and sparsest on the prothorax; head moderately large, as long as wide, the sides behind the eyes broadly arcuate and slightly convergent throughout to the basal angles, which are slightly more than right and scarcely at all rounded, the base truncate; antennae fully as long as the head and prothorax combined, rather stout; prothorax narrower than the head, somewhat wider than long, the sides subparallel and nearly straight, the angles very obtuse but only moderately rounded; elytra large, wider than the head, nearly a third wider than the prothorax and fully one-half longer, a little longer than wide, parallel; under surface of the head dull, densely, subrugosely punctured, the gular sutures fine, scarcely impressed, gradually converging to the base of the head, where they become narrowly separated. Length 4.5 mm.; width 0.8 mm. Colorado (Ouray), — Mr. Wickham..**inquilinum** n. sp.

Prosternum carinate throughout its length; basal angles of the head distinctly, though not very broadly, rounded; antennae somewhat long and thick as in *inquilinum*..12

12 — Body rather stout, parallel, dark rufo-ferruginous throughout, the head and pronotum shining, though finely, rather closely punctate, the latter less closely, the elytra finely, very closely and more distinctly, the abdomen extremely minutely and densely; head moderately large, almost as wide as long, the sides parallel and nearly straight from the eyes to the basal angles; neck half as wide as the head; prothorax large and well developed, subequal in width to the head, a little wider than long, the sides almost straight and parallel, the angles obtusely rounded; elytra large, much larger than the head, somewhat longer than wide, a fourth wider and one-half longer than the prothorax, the sides subparallel; under surface of the head more coarsely, closely and rugosely punctured, the sutures as in the preceding species, with the narrow intervening space becoming polished and impunctate toward base; prosternum convex longitudinally. Length 4.0 mm.; width 0.85 mm. New Mexico (Coolidge), — Mr. Wickham. **nitidulum** n. sp.

Body somewhat stout and depressed, dullish in lustre, pale castaneous in color, the head above and the metasternum darker, piceous; punctures fine, feeble and very close-set on the head, sparse on the prothorax, minute and very dense on the elytra and abdomen; pubescence rather conspicuous; head moderate, as long as wide, parallel and nearly straight at the sides; prothorax a trifle narrower than the head, slightly obtrapezoidal, somewhat wider than long; elytra much wider than the head, quadrate, not longer than wide, notably wider and longer than the prothorax, parallel, the sides very feebly arcuate; under surface of the head rugosely and closely punctured but rather less coarsely than in *nitidulum*, the gular sutures similar but more impressed; prosternum flattened longitudinally, the carina more conspicuous than in *nitidulum*. Length 4.6 mm.; width 0.95 mm. California (Lake Tahoe). **opaculum** n. sp.

13 — Body small, slender, parallel, polished, the elytra and abdomen duller, rufo-piceous in color throughout, the head usually darker; head and pronotum minutely but deeply and rather closely punctate, the latter but slightly less closely and equally strongly, with a broad smooth median line; head small, as long as wide, parallel and nearly straight at the sides, with slightly obtuse and distinctly, though not broadly, rounded basal angles; antennae slender, not as long as the head and prothorax combined; prothorax wider than the head, as long as wide, quadrate, the sides parallel and very feebly arcuate, the angles rounded; elytra quadrate, not longer than wide, but little wider though notably longer than the prothorax, parallel, sometimes broadly and nubilously paler toward the sides and narrowly at tip; under surface of the head shining, finely, sparsely punctate, the gular sutures very fine, almost obliterated, converging, becoming moderately narrowly separated posteriorly; prosternum convex, not at all carinate except posteriorly. Male, with the fifth ventral unmodified, the sixth broadly sinuato-truncate throughout its width at apex, the sinuation very feeble; male rare, the female abundant. Length 2.9 mm.; width 0.5 mm. Texas (Austin and Columbus) .... **texanum** n. sp.

The described species noted in the above table were previously regarded by the writer as forming "Group A" of *Lithocharis* (Bull. Cal. Acad. Sci., II, 1886), but are evidently congeneric with the European *Medon*. The species described under the names *inquilinum*, *nitidulum* and *opaculum* are apparently associated with ants, or, at least, the first is pinned with some specimens of a small piceous-black ant, having dark brown legs and antennae and 2.2 mm. in length; all three of them are probably rare and are represented at present by unique females. *Americanum* is also represented by a single female, the male being apparently much rarer than the female throughout the genus.

Paramedon n. gen.

This genus is composed of a large number of species confined principally to the true Pacific coast fauna but extending also into the adjacent elevated regions of the continent, having, in fact, a distribution almost precisely similar to that of *Orus*, of the Scopaei. It is closely allied to *Medon*, but has the anterior tarsi much more strongly dilated, especially in the male, and the male sexual characters are of a different character; in external appearance it differs in its rather stouter form with relatively larger elytra. In a previous paper by the author describing a few of the species (Bull. Cal. Acad. Sci., II, 1886), it was erroneously regarded as a section of *Lithocharis*. The species resemble each other to such a degree that it seems to be impossible to separate them in a recognizable manner by descriptions, without making extensive use of the secondary male sexual characters, which conspicuously modify the apex of the fifth ventral segment; these are fortunately sufficiently varied to enable us to do this with greater or less success. The large rounded emargination of the sixth ventral is, however, so constant in form as to be of very little use in classification. The gular sutures vary greatly in extent of separation, from almost complete contiguity, as in *kernianum*, to a very wide degree of separation, as in *gulare*. This enables us to divide the species into two rather arbitrary sections. The sutures in the second section of the table are sufficiently separated to be readily observed with an ordinary hand lens. In the following table I have recognized twenty-seven species as valid: —

Gular sutures very approximate.. 2

Gular sutures more or less widely separated..............................15

2 — Species of the Pacific coast regions.................................. 3

Species peculiar to Arizona..14

3 — Median process projecting from the bottom of the broad sinus of the fifth ventral of the male abruptly limited at its sides.................. 4

Median process not abruptly limited laterally, broadly arcuate or becoming gradually feebly sinuate medially......................................12

4 — Median process about one-third as wide as the sinus or but slightly wider... 5

Median process much wider, always very much more than one-third as wide as the sinus and always broadly and distinctly sinuate.......... 9

5 — The median process short, truncate, parallel-sided, scarcely more than a third as wide as the sinus, which is about three-fifths as wide as the segmental apex, the sides of the sinus between the process and the rectangular apices distinctly and evenly curved, and with the usual fringe of black spinules well developed; gular sutures fine, feeble, scarcely impressed, narrowly but perceptibly separated. Body moderately stout, pale rufo-testaceous throughout, the head above and beneath, prothorax, abdomen above and metasternum piceous-black; head not wider than the prothorax, parallel and nearly straight at the sides; prothorax a little wider than long, feebly obtrapezoidal and but little narrower than the elytra, the latter scarcely longer than wide, paler, rufous, the punctures sparse, the surface shining; abdomen more densely and finely punctured. Length 3.9 mm.; width 0.8 mm. Vancouver Island.................................**vancouveri** n. sp.

The median process wider and distinctly sinuate 6

6 — Head parallel and straight at the sides behind the eyes, which are unusually small, the basal angles rather narrowly rounded. Body dark testaceous in color, the abdomen blackish; surface shining, rather sparsely punctate, the elytra more finely and closely and the abdomen densely; gular sutures fine, approximate though sensibly separated, scarcely impressed; head distinctly wider than the prothorax, the latter sensibly wider than long, very feebly obtrapezoidal; elytra rather longer than wide, a fifth wider and nearly one-half longer than the prothorax. Sinus of the fifth segment well developed, about three-fourths as wide as the segmental apex, the process two-fifths as wide as the sinus, broadly sinuate at tip, with its lateral angles rounded, the sides diverging to the base; sides of the sinus between the process and rectangular apices feebly curved and with about eight black spinules. Length 3.7 mm.; width 0.85 mm. California (Siskiyou Co.).........**shastanicum** n. sp.

Head parallel but more or less feebly arcuate at the sides behind the eyes, which are rather larger, the basal angles much more broadly rounded, distinctly wider than the prothorax though less obviously so in *humboldti*, the prothorax very faintly obtrapezoidal and distinctly wider than long, with the sides nearly straight........................ 7

7 — Punctures sparse, the surface more shining; body notably stout, blackish-piceous in color, the elytra paler and generally bright rufous, the legs testaceous; head large, the antennae as long as the head and prothorax, the elytra distinctly wider than the prothorax and as wide as the head, rather longer than wide; gular sutures fine, straight and parallel, approximate though sensibly separated and not impressed. Sexual characters of the male identical with those of *shastanicum*, the sinus of the fifth segment about two-thirds as wide as the segmental apex but with the process virtually similar. Length 4.0 mm.; width 0.95 mm. California (Sta. Cruz to Lake Co.)........**latiusculum** Csy.

Punctures close-set, the surface more alutaceous; body less stout....... 8

8 — Body more evenly parallel, the prothorax notably larger and only slightly narrower than the head or elytra, blackish-piceous, the prothorax, elytra, legs and antennae paler and piceo-testaceous; elytra obviously longer than wide, a fourth wider and rather more than one-half longer than the prothorax; gular sutures very approximate and distinctly impressed. Sinus of the fifth ventral broad and well developed but not very deep, the process scarcely at all more than one-third of its total width, broadly sinuate with rounded angles, its sides but feebly divergent to the base; fimbriate sides only very feebly, evenly curved and but slightly narrower than the process; surface of the segment feebly flattened toward the middle throughout, the flattened area more finely and sparsely pubescent. Length 4.2 mm.; width 0.8 mm. California (Sta. Clara Co.)..........................**malacum** Csy.

Body less evenly parallel, the elytra being notably wider than the head and a fourth wider and one-half longer than the prothorax, not longer than wide, still more finely and closely punctured, dark rufo-testaceous, the head and abdomen blackish, the legs pale; abdomen notably narrower than the elytra; gular sutures fine but distinct, not distinctly impressed, very narrowly separated. Sinus of the fifth segment nearly as in *malacum*, but with the fimbriate sides evenly though more strongly curved, only slightly narrower than the median process, which is more broadly sinuate and nearly parallel-sided; surface of the segment not modified. Length 3.8 mm.; width 0.75 mm. California (Humboldt Co.)..**humboldti** n. sp.

9 — Gular sutures almost completely contiguous and distinctly impressed; head large, with the basal angles broadly rounded, notably wider than the prothorax...10

Gular sutures very narrowly but perceptibly separated and not or very feebly impressed; head only very slightly wider than the prothorax; species smaller in size..11

10 — Sinus of the fifth segment about three-fifths as wide as the apex, only moderately deep, the median process somewhat less than half as wide as the sinus, with rounded lateral angles, sinuate throughout almost in circular arc, the sinus five or six times as wide as deep; sides of the process slightly diverging to the base, the fimbriate sides of the sinus rather strongly curved. Body finely, not very densely punctate,

except the abdomen which, as usual, is densely and more finely punctate, piceous, the elytra rather bright rufous, the legs pale; head behind the clypeal margin fully as wide as long, parallel and straight at the sides behind the rather well developed eyes; prothorax slightly wider than long, very feebly obtrapezoidal; elytra large, rather longer than wide, wider and longer than the head, a third wider and three-fifths longer than the prothorax. Length 4.5 mm.; width 0.9 mm. California (Kern Co.)..**kernianum** n. sp.

Sinus similar in extent and depth, the median process a little larger, about half as wide as the sinus, more deeply but less broadly sinuate in subparabolic arc, but little more than four times as wide as deep, the sides feebly diverging from the rather narrowly rounded and subrectangular angles to the base, the fimbriate sides of the sinus feebly curved. Body finely, not very closely punctate anteriorly, blackish-piceous, the elytra but slightly paler, the legs brownish-testaceous; head not quite as long as wide, parallel and straight at the sides behind the eyes, which are rather well developed; prothorax slightly wider than long, nearly straight and parallel at the sides, the angles all rounded as usual; elytra but slightly wider than the head, rather longer than wide, a fourth wider and half longer than the prothorax. Length 4.6 mm.; width 0.8 mm. California (near San Francisco)...**consanguineum** Csy.

11 — Head unusually narrow, rather longer than wide and only just visibly wider than the prothorax, parallel and straight at the sides behind the rather well developed eyes, the basal angles moderately broadly rounded; prothorax but little wider than long, the sides straight and almost parallel, the angles all rather less rounded than usual; elytra about a fourth wider and half longer than the prothorax, fully as long as wide; body unusually slender, piceous, polished and sparsely punctulate anteriorly; elytra and legs but little paler. Secondary sexual characters of the fifth ventral almost as in *consanguineum* throughout. Length 4.0 mm.; width 0.7 mm. California (San Mateo Co.).....**contiguum** Csy.

Head broader behind the clypeal margin, fully as wide as long, the sides behind the rather well developed eyes parallel and straight, with the basal angles rather broadly rounded; prothorax well developed, feebly obtrapezoidal, slightly wider than long, with almost straight sides and rather narrowly rounded angles, just visibly narrower than the head; elytra quadrate, scarcely a fourth wider and less than one-half longer than the prothorax; body moderately slender, blackish-piceous, the elytra and legs slightly paler, rufescent; integuments shining, very finely and not closely punctate anteriorly. Sinus of the fifth ventral three-fifths as wide as the apex, the median process very wide, nearly three-fifths as wide as the sinus, its sinus very broad, deep and parabolic, occupying the entire apex and about five times as wide as deep, its angles rather narrowly rounded and the sides but feebly diverging to the base; fimbriate sides of the segmental sinus rather strongly curved, the spinules about six in number. Length 3.7 mm.; width 0.75 mm. California (southern — probably Los Angeles Co.).....**subsimile** n. sp.

Head still broader behind the clypeal margin, a little wider than long, the sides behind the unusually small eyes subparallel and broadly arcuate, the width just before the broadly rounded basal angles rather greater than at the eyes; prothorax obviously narrower than the head, distinctly and rather strongly obtrapezoidal, somewhat wider than long, the sides nearly straight and the angles moderately broadly rounded; elytra scarcely wider and but little longer than the head, not quite as long as wide, a fifth wider and one-third longer than the prothorax; body moderately stout, piceous-black, prothorax slightly paler, the elytra and legs rufous, the head rather densely punctate, the pronotum more sparsely and shining. Sinus of the fifth segment unusually narrow, but little more than half as wide as the apex and shallow, the process unusually wide and large, three-fourths as wide as the sinus, broadly sinuate in its median three-fourths in circular arc; fimbriate sides of the segmental sinus very short, strongly curved and with about five spinules. Length 3.8 mm.; width 0.8 mm. California (locality unrecorded)................................ **difforme** n. sp.

12 — Process slightly more than one-third the total width of the sinus, its sides diverging at an angle of 45° to the base, its sides at apex broadly rounded, its median sinus feeble in circular arc, broadly toward the middle; fimbriate sides or the principal sinus broadly, evenly and feebly curved; surface of the fifth segment not flattened. Body moderately slender, piceous-black, rather shining, finely and not closely punctate anteriorly, the prothorax slightly, the elytra and legs distinctly, paler; head rather small and narrow, as long as wide, the basal angles very broadly rounded, the sides thence to the well developed eyes straight and parallel; prothorax well developed, fully as wide as the head, parallel and straight at the sides, a little wider than long; elytra scarcely as long as wide, rather more than a fourth wider and fully one-third longer than the prothorax; gular sutures gradually becoming very approximate posteriorly, slightly impressed. Length 4.0 mm.; width 0.8 mm. California (Mendocino and Sta. Cruz Cos.). **retrusum** Csy.

Process much wider, broadly arcuate throughout or becoming slightly truncate toward the middle, never distinctly sinuate............... 13

13 — Body less slender, piceo-rufous, the head darker and the abdomen black; head as wide as long, parallel and straight at the sides behind the eyes with the basal angles rounded, not evidently wider than the prothorax, the latter distinctly wider than long, parallel at the sides with rounded angles; elytra quadrate, much wider and longer than the prothorax. Process in the sinus of the fifth segment broadly, evenly arcuate throughout its width and fully half as wide as the sinus. Length 4.0 mm.; width 0.85 mm. California (Napa Co.). **sublestum** Csy.

Body slender, piceous, the prothorax and flanks of the elytra nubilously pale, the legs very pale; surface shining anteriorly; head rather wider than long, parallel and straight at the sides, distinctly wider than the prothorax, the basal angles rounded; prothorax straight and parallel at the sides, fully as long as wide, with broadly rounded angles; elytra rather longer than wide, nearly one-half wider than the prothorax and three-fifths longer; gular sutures quite distinctly, though narrowly, separated; parallel, except anteriorly, where they become rather abruptly divergent. Process of the fifth ventral very large, three-fifths as wide as the sinus, broadly arcuate throughout its width and becoming slightly truncate toward the middle; fimbriate sides — making an angle of 45° with a transverse line — feebly curved. Length 3.9 mm.; width 0.7 mm. California (Sonoma Co.) .... **languidum** Csy.

14 — Moderately slender, fusco-testaceous, the head and abdomen black, the flanks of the elytra nubilously paler, the legs pale; anterior parts rather shining, the punctures small and not dense, fine and dense on the elytra and abdomen; head rather small, distinctly wider than long, the basal angles only moderately broadly rounded, the base broadly truncate, the neck a little narrower than usual, the sides behind the eyes straight and parallel, the eyes larger than usual, more than half as long as the distance thence to the base of the head; prothorax well developed, fully as wide as the head or a little wider, almost as long as wide, broadly rounded at apex, the sides parallel; elytra quadrate, a fourth wider and nearly one-half longer than the prothorax; gular sutures widely separated anteriorly, straight and gradually convergent thence nearly to the base, becoming very approximate, the space between them anteriorly densely and roughly sculptured, the intersutural area very feebly impressed. Length 3.9 mm.; width 0.8 mm. Arizona.
apacheanum n. sp.

15 — Species inhabitating the regions immediately bordering the Pacific Ocean 16

Species inhabiting the high Sierras and eastward 22

16 — Prothorax more or less distinctly wider than long 17

Prothorax smaller, oblong, fully as long as wide and apparently longer, always narrower than the head; species frequently very small in size, the neck narrower than usual 21

17 — Gular sutures very widely separated, the intervening space at the narrowest point wider than the maximum width of the third palpal joint 18

Gular sutures less widely separated, the intervening space slightly narrower than the width of the third palpal joint 19

18 — Body rather small and slender, feebly shining anteriorly with the head more alutaceous, dark testaceous in color, the head somewhat and the abdomen notably, darker, piceous, the elytra clouded with piceous; legs pale; head finely, rather closely punctate, convex, rather wider than long, very slightly wider than the prothorax, straight and parallel at the sides behind the rather small eyes, the basal angles broadly rounded; prothorax only just visibly wider than long, nearly straight and subparallel at the sides, sparsely punctate; elytra rather longer than wide, fully two-fifths wider and one-half longer than the prothorax; gular sutures broadly arcuate, feebly impressed, least separated at, or a little behind, the middle of the post-oral surface, which is rather finely and sparsely punctate. Median process in the apical sinus of the fifth ventral rather narrow, scarcely more than a third as wide as the sinus, broadly sinuato-truncate throughout its width at apex, its lateral angles well marked and rectangular, its sides short, rectilinear and parallel; surface with an arcuate series of long and widely spaced bristles at some distance before the process but otherwise unmodified; fimbriate sides of the segmental sinus distinctly curved, each having

about eight black spinules. Length 3.5 mm.; width 0.65 mm. California (near San Francisco) ....**gulare** n. sp.

Body nearly similar in form and coloration to the preceding, the head and abdomen blackish, the elytra brighter rufous and less clouded; head finely, less closely punctate, similar in form but with the eyes evidently larger, more obviously wider than the prothorax, the latter very distinctly wider than long, nearly parallel at the sides, the angles moderately rounded; elytra about as long as wide, a third wider and three-fifths longer than the prothorax; gular sutures broadly arcuate and slightly impressed, nearly as in *gulare* in form, the under surface of the head more coarsely, closely and subscabrously punctate. Median process of the fifth segment broader, nearly half as wide as the sinus, its apex truncate, becoming only just visibly sinuate toward the middle, its lateral angles rather broadly rounded and with the sides becoming parallel only at the base; fimbriate sides rather strongly curved, each with about six or seven porrect black spinules, surface with a sparse arcuate series of bristles before the process. Length 3.4 mm.; width 0.65 mm. California (probably the middle coast region)..**distans** n. sp.

19—Head narrow, somewhat longer than wide and not wider than the prothorax in the female, the sides long, straight and parallel behind the moderately developed eyes, the basal angles moderately rounded. Body slender, the anterior parts finely, sparsely punctured and polished, piceous-black, the abdomen blackish, the elytra paler and brownish-rufous; prothorax only just perceptibly wider than long, nearly parallel and straight at the sides, the angles rather broadly rounded; elytra relatively much smaller than usual, about a fourth wider and scarcely one-half longer than the prothorax, scarcely as long as wide; under surface of the head polished, finely, sparsely punctured and convex, the gular sutures parallel and straight through the greater part of their extent and distinctly impressed. Male unknown. Length 4.0 mm.; width 0.65 mm. California (San Francisco).....**luctuosum** Csy.

Head perceptibly wider than the prothorax in both sexes, rather wider than long, the sides parallel and straight behind the eyes, the basal angles moderately broadly rounded.......................................20

20—Smaller species, pale flavo-testaceous in color, more or less feebly clouded with piceous—notably on the posterior parts of the abdomen. Head only very slightly wider than the prothorax, finely, not densely punctate; prothorax rather large and well developed, notably wider than long and unusually strongly obtrapezoidal in form, the angles narrowly rounded; elytra rather small, quadrate, a fifth wider and about one-half longer than the prothorax; gular sutures straight. Median process of the fifth ventral short, about two-fifths as wide as the sinus, the latter relatively somewhat smaller and deeper than usual, the process very feebly, almost evenly sinuate at apex, its lateral angles narrowly rounded and with its sides parallel at base; fimbriate sides strongly curved and having unusually coarse black spinules; surface without the arcuate series of bristles before the process but clothed with very coarse black hairs throughout. Length 3.4 mm.; width 0.6 mm. California (Siskiyou Co.)..........**pallescens** n. sp.

Larger species, piceous-black, the prothorax and elytra rufo-piceous, the legs and antennae pale. Head distinctly wider than the prothorax in the female, the eyes only moderately developed and rather smaller than in the female of *pallescens;* prothorax relatively smaller, scarcely more than just visibly wider than long, subparallel and nearly straight at the sides, the angles rounded; elytra relatively larger, somewhat longer than wide, fully a third wider and three-fifths longer than the prothorax, not paler in color than the latter; under surface of the head rather flat and somewhat strongly and closely punctate, the gular sutures fine, scarcely at all impressed, nearly straight and just visibly converging to a short distance from the base, the intersutural region paler in color. Length 4.0 mm.; width 0.72 mm. California (Sta. Cruz Co.)..**conforme** n. sp.

21 — Body slender, black, the anterior parts with a slight piceous tinge, scarcely at all paler on the elytra; head and prothorax polished, finely, sparsely punctate, the former rather wider than long, only slightly wider than the prothorax, parallel and nearly straight at the sides behind the unusually small eyes, the basal angles moderately broadly rounded; prothorax as long as wide, the apex oblique at each side of the neck, the apical angles broadly obtuse; elytra quadrate, almost one-half wider and longer than the prothorax; under surface of the head broadly convex, rather strongly but sparsely punctate, the gular sutures very fine, almost obliterated, wholly unimpressed and sensibly converging nearly to the base, where they are more narrowly separated than in any of the preceding species of this section. Median process of the fifth ventral very narrow but rather long, about a fourth as wide as the sinus, deeply sinuate at apex with its sides straight and nearly parallel and the angles acute; fimbriate sides of the segmental sinus long, very feebly curved, each with about ten or eleven unusually long black spinules. Length 3.5 mm.; width 0.6 mm. California (Sta. Clara Co.). **gregale** Csy.

Body shorter and relatively less slender, the elytra scarcely picescent, the legs brown; surface shining, the abdomen dull; head very finely, not very densely punctured, as long as wide, evidently wider than the prothorax, the sides behind the rather small eyes parallel and broadly, distinctly arcuate, the basal angles broadly rounded; prothorax nearly as in the preceding but with the sides of the apex less oblique and more rounded and the obtuse apical angles more broadly rounded; elytra two-fifths wider and one-half longer than the prothorax, scarcely longer than wide; under surface of the head convex, polished, rather finely, sparsely punctate, the gular sutures fine, but slightly impressed, gradually and feebly converging nearly to the base almost as in *gregale.* Median process of the fifth ventral distinctly more than a third as wide as the sinus, deeply and evenly sinuate at apex from side to side, its angles acutely rounded and less than right, its sides straight and diverging thence to the base; fimbriate sides very feebly curved; surface having some long bristles before the process at each side of the middle, nearly as in *gregale.* Length 3.2 mm.; width 0.6 mm. California (Sta. Cruz to San Francisco).......................**mimulum** Csy.

Body very slender, dark rufo-piceous in color, the elytra piceous, the legs paler; surface rather shining, finely, sparsely punctate, the elytra and abdomen more densely and subasperately punctate and duller; head small, narrow, as long as wide, scarcely perceptibly wider than the prothorax, the sides parallel and straight behind the rather small eyes, the angles well rounded; prothorax nearly as in *gregale* but with the obtuse apical angles more rounded; elytra somewhat longer than wide, about one-half wider and longer than the prothorax; under surface of the head rather finely and sparsely punctate, moderately convex, the gular sutures almost straight and parallel throughout the greater part of their extent, noticeably more deeply impressed and more widely separated than in either of the preceding species. Median process of the fifth ventral very large, fully one-half as wide as the sinus, deeply sinuate throughout its width at apex, with the angles narrowly rounded and rather less than right, its sides parallel to the base; fimbriate sides rather short, very slightly curved, each with about eight spinules; surface of the segment just before the process with a large uniserial cluster of very long close-set inclined bristles at each side of the middle. Length 2.9 mm.; width 0.55 mm. California (Los Angeles Co.). **debile** n. sp.

22 — Head about as wide as the prothorax or just visibly wider......... 23

Head very small, narrower than the prothorax........................ 27

23 — Body in great part dark piceous or blackish in color; gular sutures moderately separated.. 24

Body testaceous in color throughout.................................. 26

24 — Head closely punctured and rather dull in lustre. Body piceous in color, the elytra and prothorax paler, sometimes dark testaceous with the head blackish; legs pale; head just visibly wider than the prothorax, a trifle smaller in the female, minutely, closely punctate, parallel and virtually straight at the sides behind the rather small eyes, the basal angles only moderately rounded; prothorax well developed, much less punctate than the head and more shining, very slightly wider than long, slightly obtrapezoidal in form, the angles rounded; elytra quadrate, barely a third wider and one-half longer than the prothorax; under surface of the head rather closely punctate, rufous in color. Median process of the fifth ventral somewhat more than two-fifths as wide as the sinus, evenly and moderately sinuate in circular arc throughout its width, its angles right and but slighly blunt, its sides diverging thence to the base; fimbriate sides of the segmental sinus feebly curved, each with about eight black spinules; surface before the process with a transverse straight line of coarse and well spaced inclined black bristles at each side of the middle. Length 3.9 mm.; width 0.72 mm. California (Lake Tahoe)..............**tahoense** n. sp.

Head sparsely punctured and polished 25

25 — Piceous in color, the head blackish, the elytra and legs paler and testaceous; head somewhat wider than long, parallel and nearly straight at the sides behind the rather well developed eyes, about equal in width to the prothorax, the basal angles well rounded; prothorax distinctly wider than long and evidently obtrapezoidal, with the sides nearly straight, the angles narrowly rounded; elytra nearly as in *tahoense;* under surface of the head rather flat, moderately closely punctured, the gular sutures fine, feebly converging to about the

middle of the post-oral surface, where they are separated — as in the preceding species — by distinctly less than the maximum width of the third palpal joint. Median process of the fifth ventral two-fifths as wide as the sinus, moderately sinuate at apex in somewhat parabolic form, the sinus not extending quite to the side angles, which are right and but little rounded, its sides feebly diverging and straight thence to the base; fimbriate sides of the segmental sinus as in *tahoense*, the transverse discal lines of inclined bristles less developed. Length 3.8 mm.; width 0.73 mm. California (Truckee and Lake Tahoe)..**montanum** n. sp.

Piceous, though paler in color than the preceding, the head blackish and the elytra paler, the legs pale flavo-testaceous; head equal in width to the prothorax — even a little narrower in the female, parallel an straight at the sides behind the rather well developed eyes, the basal angles rather broadly rounded; prothorax distinctly obtrapezoidal with the sides nearly straight, obviously wider than long; elytra quadrate, a fourth to fifth wider than the prothorax; under surface of the head sparsely punctate, the gular sutures even less widely separated than in the two preceding species, and not at all impressed. Median process of the fifth ventral nearly as in *montanum* but somewhat wider, the fimbriate sides rather shorter and more strongly curved, the discal rows of bristles nearly similar. Length 4.0 mm.; width 0.7 mm. Idaho (Coeur d'Alène)..............................**boreale** n. sp.

26 — Moderately slender, larger in size, somewhat shining throughout, the punctures only moderately close-set on the head which is generally a little darker in color, very slightly wider than the prothorax, parallel and straight at the sides behind the rather small eyes and with well rounded basal angles; prothorax well developed, evidently obtrapezoidal and wider than long; elytra relatively rather small in size, a fifth wider and two-fifths longer than the prothorax; under surface of the head strongly, moderately closely punctate, the gular sutures rather strongly convergent, becoming parallel at about the middle of the post-oral surface, where they are separated by but little more than half the width of the third palpal joint, strongly impressed. Median process of the fifth ventral but little less than one-half as wide as the sinus, which is rather deep, its apex feebly sinuate in circular arc throughout the width, its angles right but well rounded, its sides diverging thence to the base; fimbriate sides moderately curved but less widely diverging than usual, each with some eight or nine black spinules. Length 4.4 mm.; width 0.75 mm. Arizona (Williams),— Mr. Wickham.
arizonicum n. sp.

27 — Body small and moderately slender, piceous, the head blackish, the flanks and apex of the elytra broadly and nubilously pale testaceous, the legs pale as usual; surface shining throughout but with the punctures, even of the head and pronotum, close-set and minute; head small, about as wide as long, parallel and straight at the sides for a short distance behind the unusually large eyes, the basal angles broadly rounded; prothorax large, but just visibly wider than long, the sides subparallel and nearly straight, the angles rounded; elytra well developed, quadrate, a third wider and not quite one-half longer than the

prothorax; under surface of the head convex, black, shining, though rather closely punctulate, the gular sutures well impressed, widely separated, gradually converging nearly to the base of the head where they are separated by three-fourths of the maximum width of the third palpal joint. Male unknown; sixth ventral segment of the female strongly angulate at apex. Length 3.0 mm.; width 0.62 mm. Arizona (Pinal Mts.), — Mr. Wickham.................................**pinalicum** n. sp.

The species of *Paramedon* will prove to be very numerous, being also abundant in individuals as a rule, and, as the males seem to be as well represented as the females, it generally happens that male characters are at hand for use in identification. All of the species here described are represented by males except four, viz.: *apacheanum*, *luctuosum*, *conforme* and *pinalicum*, and these are sufficiently distinct in other ways by reason of well marked divergencies, either in structure or habitat, to render them easy of identification; *conforme* and *luctuosum* are, however, mutually rather closely related. In some parts of the series the species become closely allied and will require care and study in identification, as for example in the case of *boreale* and *montanum*, which may be distinguished from each other by some noticeable differences in the male sexual characters, as well as by the more sparsely punctate under surface of the head in the former. In general the species are smaller than those of *Medon* and are equally monotonous in general appearance.

Medonodonta n. gen.

This genus and the succeeding are distinguished from those which precede in the group having the labrum bidentate, by the size and prominence of the teeth, which are very acute and project so far as to be conspicuous with an ordinary hand lens; they also have the neck somewhat narrower than usual, notably so in the present genus, the single representative of which may be defined as follows:—

Slender, parallel and distinctly depressed, alutaceous in lustre and pale and uniform red-brown in color throughout; punctures obsolete except toward the side of the head and on the elytra, where they are very minute; head well developed, wider than long, the sides parallel and broadly, evenly arcuate, with the basal angles more than right but not rounded, the base truncate, becoming feebly sinuate in median third, the eyes at between three and four times their length from the base; antennae rather slender, filiform, with the joints elongate, about three-fourths longer than the head; prothorax strongly obtrapezoidal, slightly wider than long, only just visibly narrower than the head, the sides broadly and evenly arcuate, the angles obtuse but not much rounded; elytra very slightly longer than wide, just visibly narrower than the prothorax but rather distinctly longer, the sides subparallel and broadly, feebly arcuate, broadly rounding into the base; abdomen widest at the middle where it is as wide as the head and slightly wider than the elytra, the sides broadly and evenly arcuate. Length 4.3 mm.; width 0.68 mm. New Mexico..**alutacea** n. sp.

The gular sutures are moderately widely separated, gradually and arcuately converging posteriorly and most narrowly separated basally; they are notably and very broadly impressed. The single type is a female and has lost all its legs.

Oxymedon n. gen.

In general facies the single known representative of this genus departs widely from *Medonodonta*, differing in form, convexity and sculpture to a notable degree, as well as in the much more approximate and scarcely at all impressed gular sutures. It may be described as follows:—

Body rather stout, parallel and convex, strongly shining, the punctures of the head not very coarse but strong and well separated, those of the prothorax scarcely smaller but notably feebler and rather less close-set, those of the elytra somewhat coarse and very strong, nearly like those of the head but sparser; color bright and uniform pale testaceous throughout, the head sometimes feebly picescent; head almost as long as wide, parallel and nearly straight at the sides, the angles broadly rounded, the eyes at a little less than three times their own length from the base, the latter becoming gradually transversely truncate toward the middle; antennae moderately slender and notably elongate, as long as the head and prothorax together, scarcely perceptibly and very gradually enlarged distally; prothorax slightly narrower than the head, as long as wide, the sides subparallel or just visibly convergent from apex to base and broadly arcuate, the angles all broadly rounded; elytra quadrate, parallel, and feebly arcuate at the sides, a fifth wider and one-third longer than the prothorax, rather wider than the head; abdomen parallel with the sides straight, not quite as wide as the head. Length 4.8 mm.; width 0.85 mm. California (Sisson and Truckee), — Mr. Wickham..**rubrum** n. sp.

The male sexual characters are nearly as in the California species of *Medon*, the fifth segment being unmodified and the sixth having a large, evenly and almost semicircularly rounded sinus, occupying virtually the entire apex and between two and three times as wide as deep, with its contour unmodified.

Tetramedon n. gen.

The labrum in this genus is remarkably similar to that of *Polymedon*, but in every other respect the two genera are altogether unlike, besides inhabiting quite different faunal provinces. The gular sutures in *Tetramedon* are moderately separated anteriorly, converging gradually to the base of the head, where they are very narrowly separated and are well impressed throughout. The single species known thus far is the following: —

Rather stout, parallel, somewhat depressed, moderately shining, black or piceous-black, the elytra bright rufous, except a large basal cloud near the scutellum, which is piceous, the legs and antennae pale red-brown; head well developed, wider than long, the sides parallel and broadly arcuate, the angles broadly rounded, the punctures not very coarse but deep and very close-set, mingled with larger circular punctures bearing stiffer setae; eyes at somewhat more than twice their own length from the base; antennae rather long and thick, subequal in length to the head and prothorax together; prothorax oblong, as long as wide, less than four-fifths as wide as the head and punctured like the latter but more finely and feebly, the sides straight and subparallel or just visibly convergent from apex to base, the angles obtuse and distinctly, though not very broadly rounded; elytra large, parallel, with slightly arcuate sides and well marked basal angles, which are widely exposed at base, distinctly longer than wide, slightly wider than the head, two-fifths wider and about one-half longer than the prothorax, moderately strongly and closely punctured; abdomen about as wide as the head, parallel, the sides just visibly arcuate, densely punctulate. Length 4.0 mm.; width 0.8 mm. New York (Hudson Valley).................. **rufipenne** n. sp.

The unique type of this interesting species is a female, but the male secondary characters are probably of the usual simple form.

Platymedon Csy.

This genus was proposed by the writer some years ago to include a peculiar myrmecophilous Paederid of moderate size, somewhat depressed and of broadly parallel form, with characters as stated in the table. Since then another member of the genus has occurred, and a specimen was kindly sent to me by Mr. Wickham as having been collected in eastern Nevada. The two species may be identified as follows: —

Stout, depressed, the sides slightly arcuate in general form, pale brownish-testaceous throughout, the head and abdomen rather darker; head and prothorax smooth, shining and subimpunctate, becoming finely punctulate and subscabrous broadly toward the sides, the elytra evenly, closely, minutely and asperately punctate; head much wider than long, somewhat transversely oval in form, the sides being parallel and broadly arcuate, the angles broadly rounded and the base transversely arcuate, the eyes moderately well developed, the sides and frontal regions bristling with a few black setae; antennae slender, as long as the head and prothorax in the male, shorter in the female; prothorax three-fifths wider than long, the sides just visibly converging from the very broadly rounded apical angles to the more obtuse but less rounded basal angles and nearly straight, distinctly wider than the head, the rounded contour of the apical angles having three or four long black bristling setae and the basal angles marked by another similar bristle; elytra much wider than long, slightly wider than the prothorax and about one-half longer, the sides strongly diverging and broadly arcuate from the rounded and scarcely at all exposed basal angles; apical margin conjointly broadly and angularly sinuate, the side margins without trace of bristling setae; abdomen short and broad, as wide as the elytra, the segments short and broad with the side margins rather thick, having numerous long bristling setae toward tip. Length 4.0 mm.; width 1.0 mm. Northern Illinois, Iowa (Iowa City) and Nebraska (West Point)..**laticolle** Csy.

Stout but more parallel, moderately depressed, pale red-brown throughout, the head and abdomen somewhat more piceous; elytra and prothorax alutaceous, finely but strongly, extremely densely and evenly punctate throughout, the latter with only vestiges of a narrow smooth median line, the head more shining, more coarsely, deeply and less closely punctured but evenly so throughout, except a narrow smooth median line, the abdomen finely, densely punctulate as usual; head but little wider than long, the sides much longer than in *laticolle* and nearly straight, the angles less broadly rounded and the base moderately arcuate; antennae longer and relatively stouter, as long as the head and prothorax even in the female; prothorax only just visibly wider than the head, about a third wider than long, the sides subparallel and feebly arcuate, the apical angles right and scarcely or only very narrowly rounded, the basal more broadly so, the bristling setae subobsolete; elytra about as long as wide, slightly wider than the prothorax and three-fifths longer, the sides diverging from the base and nearly straight, the apex only feebly sinuate; abdominal setae toward tip short. Male unknown. Length 4.6 mm.; width 0.9 mm. Nevada (Elko)..**nevadicum** n. sp.

The male secondary characters in *laticolle* are of a simple nature, the fifth ventral being unmodified, or only just visibly and broadly sinuate, and the sixth having a simple rounded sinus of moderate depth and about a third as wide as the apex. In *nevadicum* the outer labral teeth are relatively smaller and at a greater distance from the inner than in *laticolle*.

Medonella n. gen.

The single minute species, for which this generic name is proposed, is remarkable in having a type of antenna somewhat recalling *Sciocharis*, those organs being short, with the basal joint rather stout and of the usual length, the second short and less stout and the third and following still smaller and more slender; but the outer joints increase rather rapidly in size, the eleventh being about as stout as the first and the setae, though bristling, are very much shorter. It is also peculiar in that the rather widely separated gular sutures are completely effaced. The type of *Medonella* may be described as follows: —

Parallel, moderately convex and slender, polished throughout and pale rufo-testaceous, the abdomen slightly darker or picescent; punctures of the head fine, simple and sparse, of the pronotum still finer and sparser, of the elytra rather coarse, asperate and not close-set and of the abdomen unusually coarsely and sparsely asperate; head well developed, wider than long, parallel and straight at the sides, the angles right and but narrowly rounded, the base transversely truncate, becoming sinuate in the middle; antennae scarcely a third longer than the head in the female; eyes rather small but unusually convex; prothorax feebly obtrapezoidal, slightly wider than long, just visibly narrower than the head, the sides nearly straight and the angles rather obtuse, the anterior scarcely at all rounded; elytra small, about equal to the prothorax in length and width, the sides obviously diverging from the scarcely rounded basal angles and almost straight; abdomen at the middle rather wider than the elytra and fully as wide as the head, of the usual length, the sides parallel and very feebly arcuate; legs rather short. Length 1.8 mm.; width 0.3 mm. Florida (Biscayne Bay).
minuta n. sp.

The two specimens before me are females, the male being unknown as yet. The labral teeth are very difficult to observe, but the outer seem to be not only smaller than the inner but short and very broadly obtuse. It is probable that other species of this genus will occur in Cuba and elsewhere in the Caribbean region.

Oligopterus Csy.

Although possessing a distinct habitus, the very small and slender species of this genus are closely allied to *Caloderma*, having similarly four minute labral teeth, the two inner — at each side of the median sinus — less minute than the two outer, the widely separated and feebly defined arcuate gular sutures mutually most approximate well before the middle of the under surface of the head and the anterior tarsi slender, filiform and not at all dilated but only slightly thickened, even in the male. The genus differs, however, in the very small elytra, which never exceed the prothorax in length, in the minute eyes, shorter metasternum and coarser sculpture of the abdomen above and beneath. The species are few in number, widely distributed over nearly the same geographical regions as *Caloderma* and are even more closely allied among themselves than the members of that genus; the species in fact resemble each other so closely that, were it not for the much more widely separated gular sutures of *remotus*, I would be disposed to consider them all as subspecies of a single generic type. The four forms in my cabinet may be outlined as follows:—

Gular sutures separated by a minimum distance equal to about a seventh of the total width of the head, the latter well developed, as wide as long, somewhat wider than the prothorax, the sides parallel and straight, the angles rectangular and but slightly rounded; punctures small but strong, moderately close-set; prothorax obtrapezoidal, slightly wider than long, the anterior angles distinct, the punctures strong and similar to those of the head; elytra distinctly shorter than wide, equal in width to the prothorax and not quite as long, the sides feebly diverging from the base, the punctures close, strong and asperate; abdomen as wide as the elytra, finely, densely and asperately punctate; color dark rufo-piceous, the elytra darker and the abdomen black, the legs and antennae dark red-brown. Length 2.6 mm; width 0.4 mm. California (San Francisco)..**remotus** n. sp.

Gular sutures similarly fine, feeble, arcuate and unimpressed but more approximate, mutually distant at their point of minimum separation by about a twelfth of the width of the head...........................2

2 — Body as in *remotus* but somewhat more slender, similar in coloration and sculpture, the head not distinctly wider than the prothorax, with the parallel sides slightly arcuate and the basal angles more broadly rounded; prothorax fully as long as wide, strongly obtrapezoidal with the angles distinct; elytra and abdomen as in *remotus* but still narrower. Length 2.7 mm.; width 0.4 mm. California (San Francisco to Sta. Cruz.). **cuneicollis** Csy.

Body as in *cuneicollis* in coloration and sculpture but still more slender, the head slightly wider than the prothorax with the sides parallel and broadly, feebly arcuate, the basal angles scarcely rounded; prothorax as long as wide, strongly obtrapezoidal, the sides broadly arcuate; elytra equal to the prothorax in width and length, fully as long as wide, the sides diverging as usual, the basal angles rounded; abdomen as wide as the elytra, and, as usual, half as long as the body. Length 2.5 mm.; width 0.38 mm. California (Mokelumne Hill, Calaveras Co.), — Dr. Blaisdell...**filum** n. sp.

Body as in the preceding species but a little stouter than *filum*, pale rufotestaceous with the legs and antennae concolorous, the abdomen piceous; surface more polished, with the punctures a little sparser and more feeble; head slightly wider than the prothorax, parallel and feebly arcuate at the sides, the basal angles distinctly rounded; prothorax very nearly as long as wide, only moderately obtrapezoidal, the angles slightly rounded; elytra rather flattened, not quite as long as wide or as long as the prothorax but as wide as the latter, the sides almost parallel but broadly arcuate. Length 2.5 mm.; width 0.4 mm. Montana (western), — Mr. Wickham.................................**flexilis** n. sp.

The male sexual characters are constant throughout the genus, as in *Caloderma*, and consist solely of a triangular notch, with its angle somewhat blunt or narrowly rounded and situated at the apex of the sixth ventral segment. The notch is smaller than in *Caloderma*, relatively deeper and more triangular.

Caloderma Csy.

Although widely separated in some characters, such as the dilated anterior tarsi of the male and absence of labral dentition, there can be no question that *Pseudomedon* is the nearest relative of *Caloderma*. The general form of the body, and, more particularly, the small head, are the same in both genera, but the gular sutures are much more widely separated in the former. The species of *Caloderma* are numerous, confined entirely to the regions west of the crest of the Rocky Mountains and are difficult to separate in some cases, which is also the condition in *Pseudomedon*, — a smaller but very widely distributed genus. The species may be assigned to two groups based upon the sculpture of the prothorax, but those of the first group are mutually so closely allied, or at least similar in general appearance, that I prefer for the present to regard them as varietal modifications of a single species. The following table contains all the species now known to me: —

Prothorax densely sculptured with fine anastomosing longitudinal rugae.2

Prothorax with distinctly defined punctures, very rarely exhibiting traces of a longitudinally rugulose sculpture..................................3

2 — Body subparallel, rather slender, dull in lustre, black or piceous-black in color throughout, the legs and antennae also dark; head distinctly narrower than the prothorax, as wide as long, the sides parallel and nearly straight, the basal angles rounded; eyes at about twice their own length from the base, the punctures rounded and distinct, relatively rather coarse and very dense; prothorax fully as long as wide, the sides parallel and broadly, evenly arcuate, the angles all broadly rounded; elytra much longer than wide, parallel, a fourth wider and two-thirds longer than the prothorax, very minutely but strongly, asperately and densely punctate; abdomen parallel, slightly narrower than the elytra, more shining than the anterior parts and sculptured in wavy transverse lines of excessively minute and close-set asperulate punctules; under surface of the head moderately strongly but rather sparsely punctured, the gular sutures arcuate, feeble, widely separated and distant at their most approximate point — which is well before the middle — by the maximum thickness of the third palpal joint. Sixth ventral of the male with a small rounded sinus at tip, the fifth unmodified. Length 3.3-4.0 mm.; width 0.6–0.65 mm. California (Sonoma to Los Angeles Co.)..**rugosa** Csy.

Var A — Similar to the above but a little stouter and more evenly parallel, black, the prothorax, elytra, legs and antennae paler, brown; prothorax distinctly wider than long, less obviously wider than the head, more transversely truncate at apex, with the anterior angles more narrowly rounded; elytra large, much longer than wide but only a fifth or sixth wider than the prothorax; eyes larger than in *rugosa* and situated at less than twice their length from the base; gular sutures strongly arcuate, very feeble, at their closest point separated by much less than the maximum thickness of the third palpal joint. Length 3.6 mm.; width 0.65 mm. California (Sonoma and Calaveras Cos.)..**semibrunnea** n. var.

Var B — Similar to *rugosa* but smaller and rather more slender, the prothorax more truncate at apex and with narrowly rounded angles; gular sutures more approximate, nearly as in *semibrunnea;* color black throughout. Length 3.3 mm.; width 0.55 mm. California (San Mateo Co.)..**angulata** Csy.

Var C — Smaller and rather more slender than *rugosa,* dark brown in color with the pronotum, elytra, legs and antennae still paler; elytra not quite so elongate; punctures of the head rather less dense; gular sutures as in *angulata*. Length 3.1 mm.; width 0.55 mm. California (San Diego)..**continens** Csy.

3 — Elytra always much longer than the prothorax........................ 4

Elytra only very slightly longer than the prothorax, not longer than wide.13

4 — Species very large and stout, the gular sutures broadly, feebly arcuate, approximate and distinctly impressed, black throughout, the legs and antennae brown, the elytra pale at apex; head rather coarsely, closely and normally punctate, scarcely visibly narrower than the prothorax, parallel and straight at the sides, as wide as long, the basal angles unusually broadly rounded; eyes normal, at about twice their own length from the base; neck rather less than two-fifths as wide as the head; prothorax somewhat strongly convex, finely, feebly, rather sparsely punctured and shining, a little wider than long, very slightly obtrapezoidal with the angles very broadly rounded; elytra large, quadrate, a fourth to nearly a third wider than the prothorax and one-half longer, very minutely, closely punctate. Sixth ventral of the male with the usual broadly rounded apical sinus. Length 5.2 mm.; width 0.9 mm. California (Los Angeles Co.)..............................**pollens** n. sp.

Species moderate or small in size and of slender form, the gular sutures more arcuate, more widely separated and not or scarcely at all impressed; elytra longer than wide, parallel............................ 5

5 — Pronotum black; species generally somewhat larger in size.......... 6

Pronotum pale in color; species frequently very small.................. 11

6 — Elytra black or blackish, paler only at tip.............................. 7

Elytra pale throughout...10

7 — Head distinctly narrower than the prothorax......................... 8

Head subequal in width to the prothorax or never more than just perceptibly narrower... 9

8 — Prothorax much wider than long, parallel and broadly, feebly arcuate at the sides, finely but deeply, very closely punctured and rather dull in lustre, the angles moderately rounded; body much larger and distinctly less slender in form; head as wide as long, parallel and straight at the sides, very closely, rather coarsely punctured; elytra large, longer than wide, nearly a fourth wider and three-fifths longer than the prothorax. Length 3.4–3.9 mm.; width 0.6–0.68 mm. California (middle coast regions)...**mobilis** Csy.

Prothorax only very slightly wider than long, slightly obtrapezoidal in form with the anterior angles but little rounded, finely and strongly but less densely punctate; body small and very slender, more parallel than in *mobilis*, the elytra being narrower when compared with the head and prothorax; head rather strongly but much more sparsely punctate; elytra a fifth wider and one-half longer than the prothorax. Length 3.0 mm.; width 0.5 mm. California (middle coast regions)........**reducta** Csy.

9 — Body rather stouter, nearly as in *mobilis* but smaller in size and more shining, the punctures distinctly less dense; head as wide as long, parallel and straight at the sides, the basal angles only slightly rounded, right; prothorax slightly wider than long, the sides just visibly converging from apex to base, the apical angles well rounded; elytra a fourth wider and fully three-fifths longer than the prothorax. Length

3.4–3.6 mm.; width 0.52–0.62 mm. California (Lake and Humboldt Cos.)..**luculenta** Csy.

Body narrower and more parallel, more slender and rather smaller in size; head nearly as in *luculenta;* prothorax but slightly wider than long, rather distinctly obtrapezoidal in form, the apical angles but little rounded; elytra relatively smaller and narrower than in *luculenta*, but very slightly wider and one-half longer than the prothorax. Length 3.2 mm.; width 0.5 mm. Nevada (Reno), California (Truckee), Washington State (Spokane) and Idaho (Coeur d'Alène)....**peregrina** n. sp.

10 — Body relatively rather stout, parallel, black and somewhat shining, the elytra, legs and antennae castaneous-brown; punctures minute and close-set, coarser and more widely separated on the head, the latter well developed, as long as wide, but slightly narrower than the prothorax, parallel and straight at the sides as usual, the basal angles narrowly rounded; prothorax much wider than long, slightly obtrapezoidal, the angles distinct; elytra well developed, nearly a fourth wider and three-fifths longer than the prothorax. Length 3.3 mm.; width 0.62 mm. Nevada (Carson City), — Mr. Wickham.............**conjux** n. sp.

11 — Sides of the prothorax parallel, broadly and feebly arcuate. Body rather slender, parallel, moderately shining, black, the prothorax piceo-castaneous, the elytra still paler, especially so broadly toward tip; head noticeably narrower than the prothorax, rather strongly and closely punctured as usual, fully as long as wide, parallel and straight at the sides; prothorax but very little wider than long, minutely punctate, the angles less rounded than in *mobilis;* elytra about a fifth wider and three-fourths longer than the prothorax, parallel. Length 3.5 mm.; width 0.68 mm. California (middle coast regions).....**contracta** Csy.

Sides of the prothorax more or less feebly convergent from the apical angles to the base; head as wide as the prothorax or somewhat wider; species smallest of the genus, slender..............................12

12 — Body black, the pronotum and elytra uniform and pale castaneous-brown, the latter only slightly paler at the extreme tip, the legs and antennae still paler; integuments shining; head as wide as the prothorax or just visibly narrower, as long as wide, shining, the punctures distinctly separated; prothorax almost as long as wide, the angles all well rounded; elytra but little longer than wide, nearly a fourth wider and barely one-half longer than the prothorax; abdomen somewhat wider than the prothorax. Length 3.0 mm.; width 0.6 mm. California (Humboldt Co.) to Washington State (Spokane)........**discolor** n. sp.

Body black, the pronotum piceous, the elytra blackish-piceous, paler at the apices especially toward the sides; surface feebly shining; head large for the present genus, somewhat wider than the prothorax, coarsely and not very densely punctate, fully as wide as long, parallel and straight at the sides; prothorax small, almost as long as wide, the angles rounded, the sides only just visibly convergent; elytra distinctly longer than wide, fully a fourth wider and three-fifths longer than the prothorax, finely but strongly, not very densely punctured. Length 2.75 mm.; width 0.55 mm. California (Sta. Clara Co.)........**tantilla** Csy.

Body pale testaceous throughout, the elytra still paler and more flavate and the abdomen piceous; surface rather shining; head well developed, equal in width to the prothorax, as wide as long, straight and parallel at the sides, the basal angles rather broadly rounded, the punctures fine and somewhat sparse; prothorax a little wider than long, feebly obtrapezoidal, the angles moderately rounded, the punctures not conspicuous; elytra but little longer than wide, a fourth wider and one-half longer than the prothorax, rather strongly punctured, shining, the sides feebly diverging from base to apex. Length 2.9 mm.; width 0.53 mm. California (southern), — Mr. Fall........................**mollis** n. sp.

Body very slender, parallel, piceous-black, the prothorax, legs and antennae dark testaceous, the elytra piceous-black, pale and subflavate in apical third or fourth; head rather wider than the prothorax, not densely punctate, shining, of the usual outline; prothorax rather small, inconspicuously punctured, feebly obtrapezoidal, the angles rather well rounded, somewhat wider than long; elytra narrow and much elongated, a fifth wider and three-fourths longer than the prothorax, rather strongly and closely punctured but distinctly shining as in the preceding. Length 2.6 mm.; width 0.45 mm. California (southern), — Mr. Fall..**exilis** n. sp.

13 — Parallel, moderately stout, black, the head piceous, the prothorax, elytra, legs and antennae pale brown, the elytra still paler and more flavate at the apical margin; surface somewhat dull in lustre; head well developed, rather wider than long, equal in width to the prothorax, parallel and very feebly arcuate at the sides, with the angles rather narrowly rounded, the punctures fine but strong and close-set; prothorax a little wider than long, feebly obtrapezoidal with the sides nearly straight and the angles moderately rounded, the surface punctured like the head but still more densely; elytra not distinctly wider than the prothorax and scarcely a third longer, the sides straight and feebly diverging from the base, densely and subrugosely punctured; abdomen but very slightly narrower than the elytra. Length 3.2 mm.; width 0.6 mm. California (Sisson), — Mr. Wickham.
brevipennis n. sp.

Parallel but somewhat less stout and less densely punctate, similar in coloration, except that the prothorax and elytra are darker and more piceous; lustre slightly shining; head narrower, rather longer than wide, slightly narrower than the prothorax, parallel and nearly straight at the sides, the basal angles rather more broadly rounded, the punctures coarse and well separated; prothorax as in *brevipennis* but with the angles more broadly rounded and the punctures smaller than those of the head and only moderately close-set; elytra equal in width to the prothorax and barely a fifth longer, quadrate, with the sides very feebly diverging from the base; abdomen equal in width to the elytra. Length 3.4 mm.; width 0.57 mm. British Columbia (Yale), — Mr. Wickham.
quadripennis n. sp.

The described species included in the table were originally made known by the writer (Bull. Cal. Acad. Sci., II, 1886) in an unsystematic manner and without adequate knowledge of their mutual affinities. The systematic arrangement of the species is a difficult matter and is rendered still less satisfactory because of the complete lack of variety in the male sexual characters; to such an extent is this true that the statement of these characters under each species would be of little or no value, for even in the otherwise isolated *pollens*, the only abdominal modification is the usual moderately deep, broadly rounded sinus at the apex of the sixth segment, which characterizes the entire genus. In my original description of *tantilla*, the prothorax is said to be "scarcely perceptibly wider than the head," but this is evidently a mistake, as the head is obviously very slightly wider than the prothorax, — a very exceptional character in the genus, although more frequent among the minute slender forms. For the present I have placed with the type of *brevipennis*, a specimen taken by myself at Lake Tahoe, differing only in a few undecisive points, such as the rather less abbreviated elytra, and another specimen from Coeur d'Alène, Idaho, which is somewhat more slender in form, less densely punctate and also with less abbreviated elytra. It is more than possible that each of these represents a species distinct from *brevipennis*, but the material at hand is insufficient to warrant a description of them, especially as all my representatives of this peculiar group, comprising *brevipennis* and *quadripennis*, are females. There is, however, little or no observable difference between the male and female in external form in those species represented before me by both sexes.

Pseudomedon Rey.

In the European Catalogue of Heyden, Reitter and Weise, this genus is attached as a subgenus to *Medon*, with which it has no close affinity whatever. It is more evidently allied to *Caloderma* than to *Medon*, especially in the form and wide separation of the gular sutures, general facies of the body and small head, but differs from both in its edentate labrum, very minute and dense sculpture and strongly dilated anterior tarsi. The species are few in number but occur throughout the United States, as well as the palaearctic regions, the

American species before me being identifiable by the following characters: —

Addomen uniform in coloration and concolorous........................ 2

Abdomen pale, with the tip black.. 6

2 — Body dark in color, the prothorax more or less distinctly norrower than the elytra, the latter fully as long as wide or somewhat longer....... 3

Body pale red-brown in color throughout, the head a little darker, the prothorax large, fully as wide as the elytra, the latter not as long as wide.. 5

3 — Prothorax pale, dull rufous in color; body more slender, black, the legs and antennae pale; dull in lustre throughout from the extremely minute, close-set punctules; head as long as wide, about three-fourths as wide as the prothorax, the sides behind the well developed eyes parallel and feebly arcuate, the basal angles broadly rounded; prothorax fully as long as wide, parallel and feebly arcuate at the sides, the angles broadly rounded; elytra about as long as wide, distinctly wider and longer than the prothorax. Length 4.0 mm.; width 0.65 mm. North Carolina (Asheville), New Jersey, New York and Rhode Island.
ruficolle n. sp.

Prothorax dark and concolorous; anterior tarsi of the male very strongly dilated.. 4

4 — Body parallel, black, dull in lustre, the prothorax never more than faintly piceous, black in maturity; elytra moderate, quadrate, only very slightly wider and about a fourth longer than the prothorax; head fully four-fifths as wide as the prothorax, rather wider at base than at the moderately developed eyes; prothorax relatively larger, but little wider than long, parallel. Length 3.3 mm.; width 0.7 mm. Massachusetts.
thoracicum n. sp.

Body less parallel, the elytra relatively larger; black and dull throughout, the legs dark piceous; head very small, three-fourths as wide as the prothorax, nearly as in *ruficolle;* prothorax slightly wider than long, parallel and feebly arcuate at the sides, the angles rounded; elytra quadrate, fully a fourth wider and two-fifths longer than the prothorax. Length 3.75 mm.; width 0.75 mm. Nevada (Reno), California (Lake Tahoe) and Oregon (Albany).......................**capitulum** Csy.

5 — Body, legs and antennae pale testaceous, the head piceous; dull in lustre throughout, rather stout and parallel in form; head unusually large, as wide as long, of the usual form, about four-fifths as wide as the prothorax, the latter very large, just visibly wider than long, fully as wide as the elytra, parallel, the sides feebly arcuate, the angles broadly rounded; elytra depressed, a little shorter than wide, but very slightly longer than the prothorax. Male not known but probably still stouter. Length 3.2 mm.; width 0.65 mm. Rhode Island (Boston Neck).
clarescens n. sp.

6 — Moderately stout, parallel, alutaceous, the elytra dull; pale testaceous, the head, elytra and last two ventral segments black; legs and antennae pale, the latter unusually long, half as long as the body; head rather well developed, five-sixths as wide as the prothorax, otherwise as in

the preceding species; prothorax as long as wide, the sides feebly arcuate, just visibly convergent from apex to base, the angles moderately rounded; elytra relatively small, as long as wide, about equal in width and length to the prothorax, the sides very slightly diverging from the base. Length 2.8 mm.; width 0.6 mm. Alabama (Eufaula). **alabamae** n. sp.

The sexual characters are simple, the male, as in *Caloderma*, having a small rounded or more or less angulate sinus at the tip of the sixth segment, becoming decidedly larger and triangular in *alabamae*, and the anterior tarsi are more strongly dilated in that sex. Some of the Massachusetts specimens, described as *thoracicum* in the table, were sent to me by M. Sallé, under the name *obsoletum* Nord., and I have also taken it myself at Taunton, Mass. It differs from the true *obsoletum*, as represented by some Dalmatian examples sent me by Mr. Reitter, in its smaller size, relatively much larger prothorax and smaller elytra and in the deeper sinus of the sixth ventral of the male. The western *capitulum* resembles *obsoletum* much more closely in size and form, but has a deeper male sinus and relatively larger prothorax. The true *obsoletum* does not therefore occur in America, and its insertion in our catalogue is a result of careless and superficial comparative study, as has been the case in many other instances. Most of our faunistic catalogues are diminished considerably in value from this cause.

Lena Csy.

Although evidently allied to *Pseudomedon* by the structure of the labrum, gular sutures and hind tarsi, this genus departs widely in general facies, sculpture, in antennal structure and in its undilated anterior tarsi. The labrum is completely devoid of any trace of teeth but has a well developed median notch; the gular sutures are moderately separated at the front of the under surface of the head but thence gradually diverge widely to the base. The antennae are somewhat as in *Medonella*, being very short, with the third joint shorter and narrower than the second, the shaft gradually becoming notably thicker or clavate toward tip. The posterior tarsi are moderately long, very slender and filiform, with the first four joints decreasing rapidly in length, the first almost as long as the next two combined, the fourth short, very oblique, extending slightly under the base of the fifth which is barely as long as the first and much more slender. The single widely disseminated species is not rare under old leaves and rubbish and may be defined as follows:—

Moderately stout, somewhat convex, parallel, pale flavo-testaceous throughout, sometimes feebly picescent beneath and on the abdomen; surface feebly alutaceous from a very minute reticulation, the elytra and abdomen rather more shining and sparsely punctate, the former somewhat coarsely and subrugulosely, the head and pronotum not finely but extremely feebly and subobsoletely punctate; head well developed, somewhat wider than long, the sides parallel and nearly straight, the angles right and rather narrowly rounded; eyes moderately large; antennae short, about a fourth longer than the head in the female; prothorax distinctly narrower than the head, slightly transverse, distinctly obtrapezoidal, the sides straight, the angles obtuse and moderately rounded; elytra large, quadrate, much larger than the head, a fourth wider and one-third longer than the prothorax, parallel, the sides nearly straight, the basal angles right, but slightly rounded and rather widely exposed at base; abdomen parallel with the sides feebly arcuate, fully as wide as the elytra, the segments short, the fifth longer as usual. Length 2.0 mm.; width 0.45 mm. Texas (Austin, Houston and Brownsville) and Florida (Enterprise)..............**testacea** Csy.

The specimens in my cabinet are females and I am therefore unable to describe the male, the secondary sexual characters of which are presumably very simple.

SCOPAEI.

The moderately numerous genera of this subtribe are composed on the whole of the smallest and most delicate species of the Paederini. They are especially developed in the American continents and comparatively poorly represented in the palaearctic regions. Some of the American genera are notable because of the elaborate secondary sexual modifications of the male, which in several cases such as *Scopaeopsis*, affect every segment of the abdomen. In many instances these secondary sexual characters extend to the entire form or relative sizes of the head, prothorax and elytra, as in

Lathrobium. The genera known to me by actual examples may be defined as follows: —

Neck moderately narrow, varying from a fourth to nearly a third as wide as the head.. 2

Neck extremely slender.. 4

2 — Gular sutures parallel, broadly, feebly arcuate, moderately separated throughout but most approximate at the middle; labrum broadly truncate with the usual rounded median notch, bidentate or edentate; body parallel, moderately convex, always pale in color, the anterior thoracic angles distinct and subapical; tarsi moderately short, the posterior slender with the two basal joints subequal. Rocky Mountain regions. **Leucorus**

Gular sutures more or less widely separated, more arcuate and most approximate anteriorly, diverging thence gradually to the base; labrum distinctly quadridentate; hind tarsi short, moderately slender, with the basal joint but little longer than the second; body black or blackish, polished and more or less sparsely punctate........................... 3

3 — Body thick and more convex, the legs thicker, the anterior tarsi dilated; thoracic angles broadly rounded and almost obliterated, the prothorax oval; labrum truncate; gular sutures distinct. Entire United States except the true Pacific coast fauna.................. **Pycnorus**

Body slender, moderately convex, the legs slender; anterior tarsi not dilated though broader and thickened; prothorax oblong, the anterior angles more or less distinct; labrum rounded; gular sutures very feeble, sometimes nearly obliterated. Entire Pacific coast region........**Orus**

4 — Posterior tarsi rather short, moderately thick, with the basal joint never more than slightly longer than the second, the anterior very feebly dilated; labrum rounded in outline, distinctly quadridentate, the teeth simple; body slender, parallel and moderately convex................ 5

Posterior tarsi long, very slender, with the basal joint always distinctly longer than the second, the anterior not or very feebly dilated; body subparallel, strongly convex, the prothorax oval with the anterior angles obtuse or subobliterated and far from the apex.................... 6

5 — Body minute in size, variable in color, more or less alutaceous because of minute dense punctuation; prothorax suboblong, with the anterior angles more or less distinct; gular sutures moderately widely separated, most approximate anteriorly, gradually diverging thence to the base. Europe and America. [= *Leptorus* Csy.]...................**Scopaeus**

Body larger, black, polished, the punctuation less fine and rather sparse; prothorax oval, the anterior angles obliterated; gular sutures parallel, nearly straight, rather approximate throughout the length of the head. Entire northern United States..........................**Scopaeoma**

6 — Body very minutely punctulate and pubescent; labrum broadly rounded, large, very coarsely quadridentate and deeply cleft at the middle, the inner teeth each with an internal denticle at base, or, unequally bifid; gular sutures virtually coalescent from a short distance behind the support of the mentum. Eastern United States..............**Scopaeopsis**

Body polished, subglabrous and subimpunctate, with sparse erect tactile setae; labrum broadly rounded, with the usual small median emargination, the inner teeth distinct, simple and aciculate, the outer very minute or subobsolete; gular sutures very fine, rather widely separated, feebly arcuate, most approximate slightly before the middle. Sonoran regions..**Scopaeodera**

I have been unable to obtain specimens of the Mexican *Euscopaeus* Shp., or of the true *Polyodontus* Sol., for comparison. In the catalogue of Heyden, Reitter and Weise, the latter of these genera is made the receptacle for most of the European Scopaei, but I can find no structural difference between the species so listed and those which are held to represent the true *Scopaeus*. It is my recollection that *Polyodontus* Sol., is a genus differing distinctly from *Scopaeus* and inhabiting Chile, but I have no means of confirming this at present.

Leucorus n. gen.

The prothorax in this genus is more oblong and with more apical and strongly defined anterior angles than in any other type of American Scopaei, and, from all other genera except *Orus* and *Pycnorus*, it is distinguishable at once by the wider neck, which varies from nearly a fourth to almost a third as wide as the head. From *Pycnorus* it departs widely in habitus, owing to the distinct thoracic angles, and, from both *Orus* and *Pycnorus*, it differs radically in the form of the labrum and obsolete external labral teeth. The color of the body is always pale ferruginous, differing conspicuously from the uniform black or piceous of the genera mentioned, and the few known species are confined as far as known to the regions west of the Mississippi River, excepting probably the true Pacific coast fauna. The four species in my cabinet may be defined as follows: —

Elytra much longer and wider than the prothorax...................... 2
Elytra subequal in length to the prothorax and but little wider........... 3
2 — Form rather stout, moderately convex, parallel, pale rufo-testaceous in color throughout the body, legs and antennae; lustre rather shining; head well developed, minutely, not densely punctate, slightly elongate, the eyes rather large but only feebly convex and not prominent, the sides behind them very feebly converging and just visibly arcuate to the broadly rounded basal angles, the truncate base obviously narrower than the width across the eyes; antennae evidently shorter than the head and

prothorax, rather slender but distinctly incrassate distally, the basal joint unusually elongate, nearly as long as the next three which diminish gradually in length; prothorax four-fifths as wide as the head, slightly longer than wide, the sides feebly converging from the obtuse and slightly rounded angles at apical fifth to the less obtuse and slightly rounded basal angles and straight, the punctures sparse and rather feeble but much larger than those of the head; elytra slightly longer than wide, distinctly wider than the head, a third wider and one-fourth longer than the prothorax, the sides very feebly diverging from the base, the punctures very fine and not close-set; abdomen but slightly narrower than the elytra, but little wider posteriorly than at base; gular sutures well separated, the intervening space with a small feeble impressed fovea just behind the mental support. Male with a deep elongate-oval excavation occupying median fourth of the fifth ventral, and having sharply defined side margins, extending to basal third or fourth, the excavation gradually narrowing and becoming obsolete near the base; bottom of the excavation flat and polished; posterior margin with a deep subquadrate notch, the sides of which are formed by obtuse prolongations of the sides of the excavation; sixth segment having a very deep and extremely narrow apical notch, acute at the bottom and three or four times as deep as wide. Length 3.3 mm.; width 0.7 mm. Arizona.......................................**ferrugineus** n. sp.

Form and coloration nearly similar to the preceding, the body narrower and the head and prothorax relatively smaller; head notably longer than wide, the eyes smaller than in *ferrugineus* but otherwise similar, the antennae more strongly incrassate distally; prothorax distinctly elongate, with the sides parallel, the anterior angles behind apical fifth and rather broadly rounded; elytra a third wider and longer than the prothorax, longer than wide; gular sutures well separated, the intermediate surface simple but more strongly micro-reticulate. Length 3.0 mm.; width 0.62 mm. Southern California......................**luridus** n. sp.

Form and coloration similar in general to the two preceding but with the prothorax relatively more developed and but just visibly narrower than the head, parallel at the sides, with the anterior and basal angles well rounded, the former at about apical fifth; sides of the head behind the well developed eyes more rapidly converging and broadly arcuate, the truncate base much narrower than the width across the eyes; antennae only very feebly incrassate; elytra but little longer than wide, slightly wider than than the head, a fourth wider and one-fifth longer than the prothorax. Length 3.4 mm.; width 0.65 mm. Colorado (Cañon City), — Mr. Wickham.................................**ochrinus** n. sp.

3 — Body parallel, rather darker testaceous, the abdomen somewhat dusky; lustre rather shining; head well developed, scarcely at all longer than wide, fully as wide as the elytra, the sides behind the somewhat smaller eyes parallel for a short distance, then broadly rounding to the truncate base; prothorax small, much narrower that the head, slightly elongate, the sides rather strongly converging from the well rounded angles at apical fifth to the rounded basal angles and straight; elytra obviously wider than the prothorax but only just visibly longer; abdomen at base as wide as the elytra, becoming wider behind. Male having

the secondary sexual characters comparatively feeble but of the same type as those of *ferrugineus*, the fifth ventral having a feeble, very narrow longitudinal impression along the middle, gradually becoming extinct before the middle of the length and not more than a tenth or twelfth as wide as the segment, the posterior margin transversely truncate, with a very minute feeble sinus at the posterior end of the impression; sixth segment having a very narrow deep and angular notch, nearly three times as deep as wide. Length 2.9 mm.; width 0.68 mm. Iowa...**rubens** n. sp.

A female from Iowa, apparently belongs to the male described as *rubens* above, but shows that the sexual differences in general form of the body are very marked, the head being much smaller in the female and only just visibly wider than the prothorax, and the abdomen is parallel or nearly so and distinctly more slender. *Luridus* and *ochrinus* are at present represented by the female alone, but the divergencies of these species from *ferrugineus*, which is represented only by the male, do not lie altogether in the direction of the sexual differences as observed in *rubens*, and there seems to be but little doubt of their validity.

Pycnorus n. gen.

The species of this genus are few in number, widely distributed over nearly the entire country, except perhaps the northern Pacific coast, and may be distinguished from *Orus* by their stouter form, shorter and stouter tarsi, the anterior more strongly dilated as a rule, more widely separated and stronger gular sutures, by the short and broadly truncate labrum, and, finally and more particularly, by the obliterated anterior thoracic angles. From *Leucorus* they are still more readily distinguished by this last character, as well as by the larger, truncate and bidenticulate to virtually edentate labrum of that genus. The male sexual characters are distinctive of the genus, as may be seen below under the description of the type species. The three forms known to me may be thus outlined:—

Form moderately stout, parallel, convex, shining, black throughout, the legs piceous with the tarsi somewhat paler; head minutely, not densely punctate, the pronotum and elytra more coarsely but sparsely so, the abdomen very minutely, densely punctulate. Head moderate, rather longer than wide, the sides parallel for about a length of the eye behind the latter, then gradually rounded and converging to the sinuato-truncate base, which is only about three-fourths of the width at the somewhat well developed eyes; basal angles obtuse but only moderately rounded; antennae a little shorter than the head and prothorax, moderately thick, very feebly and gradually incrassate distally, the basal joint but little longer than the next two combined; prothorax large, oval, a third longer than wide, parallel and broadly arcuate at the sides, the latter arcuately converging anteriorly to the neck, relatively larger and almost as wide as the head in the male, distinctly narrower in the female; elytra slightly wider than the head and a fifth wider than the prothorax, slightly elongate, more obviously so in the female, equal in length to the prothorax in the latter and slightly shorter in the male; abdomen subequal in width to the elytra. Male having all the abdominal segments sparsely clothed with longer stiff bristles at each side of the broadly flattened median third, the bristles inclined inwardly, the second segment impressed in median third almost to the base, the impression smooth and polished posteriorly and more thickly bristling with stiff hairs elsewhere, its side margins rather tumid and prominent at and behind the middle and having a dense tuft of hairs at the middle anteriorly; third segment very feebly impressed basally; fifth with a narrow and very feeble median sinus; sixth having a large simple sinus at the middle of the apex, about three times as wide as deep, the surface in the middle feebly, longitudinally and narrowly impressed; femora all thick, the posterior broadly concave on the posterior face, the lower edge of the concavity feebly serrate — as is also the inner edge of the hind tibiae — and having a large tooth near the trochanter; anterior tarsi rather strongly dilated. Length 3.2 mm.; width 0.65 mm. Massachusetts.................................**dentiger** Lec.

Form slightly more slender than in *dentiger* but nearly similar in size, form and sculpture; hind angles of the head less broadly rounded; prothorax distinctly narrower than the elytra, the latter comparatively more elongate than in *dentiger;* legs brown in color. Male characters substantially similar, excepting that the emargination of the sixth ventral is a little less broadly rounded, the inner sinuate margin of the hind femora slightly more serrate and the hind tibiae not serrate internally. California (Pomona).......................................**armiger** Fall

Form stouter and less convex than in *dentiger*, not parallel, shining, black, the legs and antennae piceous throughout; head dull in lustre, slightly elongate, the sides parallel for a short distaece behind the eyes, then broadly rounded into the base, the angles being much more broadly rounded at base than in *dentiger;* antennae slender, feebly incrassate; prothorax slightly though distinctly narrower than the head, parallel and broadly arcuate laterally, elongate-oval, more coarsely punctured than the elytra, the punctures sparse; elytra large, but slightly longer than wide, fully a fourth wider than the head, two-fifths wider than the prothorax and distinctly longer than the latter, subparallel and feebly arcuate at the sides; sutural region broadly impressed throughout; abdomen parallel, obviously narrower than the elytra. Length 3.25 mm.; width 0.73 mm. Male unknown. Iowa..........**iowanus** n. sp.

There is a small, rounded and acutely pointed tubercle at the middle of the gular intersutural surface, just behind the oral cavity, which seems to be obsolete in the female of *dentiger*, but it is present in the unique female type of *iowanus*. The latter species is very distinct from the others in its much larger elytra and more broadly and evenly rounded basal angles of the head. The characters of *armiger* are taken from the original description of Mr. Fall.

Orus Csy.

The numerous species of this genus are of slender form and more or less shining surface, due to the sparse and coarser punctuation, they being distinguished from *Scopaeus* by this character as well as the broader neck and other features mentioned in the table. *Cervicula* constitutes a remarkable exception in regard to one of the most important structural characters distinguishing the genus from *Scopaeus* and several other genera of the group, the neck being very slender and precisely similar to that characterizing the genus mentioned. In all its other characters, however, it is a typical *Orus* and *cervicula* cannot, therefore, be held to unite *Orus* with *Scopaeus*. In geographical range *Orus* is confined to the regions bordering the Pacific Ocean, not penetrating eastward, as far as known, further than the crest of the Rocky Mountain divide. The species are larger and stouter than those of *Scopaeus*, which — if we except a small aberrant form recently named *Leptorus longipennis*, by Mr. Fall, — does not form a part of the true Pacific coast fauna. The species known thus far may be defined as follows:—

Neck of the usual width, nearly a third as wide as the head.............. 2
Neck very slender as in *Scopaeus*.......................................14
2 — Prothorax elongate, never more than slightly shorter than the elytra.. 3
Prothorax invariably very much shorter than the elytra.................. 5
3 — Sides of the prothorax, from the obtusely rounded apical angles to the base, distinctly converging and straight. Body very slender, black

throughout, the legs and antennae brown, alutaceous because of very minute reticulation, the elytra shining; head well developed, scarcely longer than wide, parallel and broadly arcuate at the sides, the angles broadly rounded, the base truncate; surface very finely and closely punctate throughout; antennae not as long as the head and prothorax, with joints two to four decreasing slightly in length; prothorax much longer than wide, distinctly narrower than the head, the obtuse rounded anterior angles situated at apical fourth or fifth; surface more coarsely and unusually closely punctured throughout, the median line feebly elevated toward base; elytra but little longer than wide and only about a fifth longer than the prothorax, though fully two-fifths wider, parallel, finely but strongly, asperately punctate; abdomen parallel and elongate, wider than the head; gular sutures fine but evident, somewhat widely separated, the intervening space more strongly and coarsely micro-reticulate than the remainder of the surface. Male unknown. Length 3.5 mm.; width 0.5 mm. California (Lake Tahoe)..................**longicollis** n. sp.

Sides of the prothorax parallel or not distinctly converging, nearly straight, the obtusely rounded apical angles more anterior, at about apical fifth or sixth.. 4

4 — Larger species, parallel in form, dark rufo-piceous in color, except the head and abdomen which are blackish; surface moderately shining, the micro-reticulation of the anterior parts evident but feeble; head well developed, slightly longer than wide, throughout nearly as in *longicollis*, the antennae nearly as long as the head and prothorax, with joints two and three equal in length, the fourth shorter; prothorax unusually large, but little, though evidently, narrower than the head, a third longer than wide, the punctures rather coarse and unusually close-set throughout but not very deep; elytra but little longer than wide, parallel, very finely and rather closely punctate, barely a fifth longer than the prothorax and nearly one-half wider; abdomen much narrower than the elytra though obviously wider than the head; gular sutures nearly as in *longicollis*. Male unknown. Length 3.3 mm.; width 0.68 mm. California (Napa and Sonoma Cos.)..............................**parallelus** Csy.

Smaller in size, shining, the micro-reticulation scarcely traceable, black in color throughout, the legs and antennae piceous; head well developed, scarcely visibly longer than wide, nearly as in the preceding species in form, the minute but deep punctures rather less close-set; antennae shorter than in *parallelus*, distinctly shorter than the head and prothorax, with joints two to four gradually decreasing in length as usual; prothorax relatively smaller, much narrower than the head, the punctures larger than those of the head as usual but fine, sparse and notably feeble; elytra only just visibly longer than wide, with the sides very feebly diverging from base to apex, about a fifth longer and two-fifths wider than the prothorax, finely, not very densely punctate; abdomen but little narrower than the elytra and much wider than the head; gular sutures nearly as in the preceding. Male unknown. Length 3.0 mm.; width 0.6 mm. Idaho (Coeur d'Alène), — Mr. Wickham.
boreellus n. sp.

5 — Prothorax subequal in width to the head, rather larger in size than in *punctatus*, nearly black in color and of rather robust form. Fifth ven-

tral of the male feebly sinuato-truncate and very slightly impressed, the sixth triangularly emarginate, the notch much less deep than in *punctatus* and with its diverging sides not at all sinuate posteriorly, its apical angle somewhat less than right and but slightly rounded. California (San Bernardino Mts.)........................**montanus** Fall

Prothorax always distinctly narrower than the head.......................6

6 — Head unusually developed, as wide as long or very nearly so —estimating from the line of supra-antennal tubercles...................... 7

Head narrower, more or less distinctly longer than wide................ 8

7 — Color pale piceous-brown, the head and abdomen blackish; form rather stout, the surface shining, the micro-reticulation subobsolete; head large, fully as wide as long, the eyes well developed, the sides behind them parallel and straight, the basal angles broadly rounded, the punctures minute but deep, moderately close-set; antennae moderate; prothorax small, much narrower than the head and about equally long, only a little longer than wide, the sides very feebly converging from the obtuse but distinct apical angles to the base and broadly feebly arcuate, the punctures coarse, sparse and rather strong; elytra parallel, about a fifth longer than wide, two-fifths wider and nearly one-half longer than the prothorax, wider than the head, finely and not densely punctured; abdomen much narrower than the elytra and scarcely wider than the head. Male sexual characters of the *punctatus* type, the notch of the sixth ventral being similar, the fifth segment having a broad median lobe which is evenly rounded throughout its contour and shorter than in *punctatus*, the surface strongly, longitudinally impressed in about apical half. Length 3.2 mm.; width 0.6 mm. California (Sonoma Co.). **sonomae** n. sp.

Color uniform pale piceous-brown throughout, except the head and abdomen which are black; surface of the head and pronotum alutaceous, the fine reticulation strong; head well developed, scarcely visibly elongate, the eyes rather large, the sides behind them parallel and straight only for a very short distance, then rounding into the very broadly rounded basal angles, the punctures very minute and sparse; prothorax relatively larger and more elongate than in *sonomae*, though distinctly narrower than the head, about a fourth longer than wide, subparallel and nearly straight at the sides, the obtuse though scarcely rounded apical angles at about a fifth of the length from the apex, the punctures moderately large but sparse and extremely feeble, almost completely obliterated; elytra distinctly elongate, parallel, two-fifths wider and a little less than one-half longer than the prothorax, moderately strongly, subasperately and not very densely punctate. Male unknown. Length 2.9 mm.; width 0.55 mm. Washington State (Spokane). **pugetanus** n. sp.

Color deep black throughout, the legs piceous-black, the tarsi and antennae paler, rufous; surface strongly shining, the reticulation obsolescent; head large, very nearly as wide as long, the eyes only moderately large, the sides behind them parallel for a rather long distance, the angles somewhat broadly rounded; antennae rather short, gradually thicker toward tip; punctures fine, very deep and close-set throughout; prothorax somewhat distinctly narrower than the head, slightly longer than wide, parallel and just visibly arcuate at the sides, the apical angles obtuse and one-fifth from the apex, the punctures rather coarse but very sparse, distinct though not deep; elytra large, parallel, only a fifth or sixth longer than wide, fully one-half wider and longer than the prothorax, finely, sparsely and not asperately punctate and strongly shining; abdomen much narrower than the elytra and very distinctly wider than the head; gular sutures extremely feeble, unusually widely separated and but slightly diverging toward base, the intervening space feebly reticulate like the remainder of the surface. Male unknown. Length 3.4 mm.; width 0.65 mm. California (Lake Tahoe). **robustulus** n. sp.

8 — Body pale brownish-piceous in color throughout, the head and abdomen but slightly darker; surface highly polished and without trace of minute reticulation on the pronotum; form narrow, the head notably narrow and elongate, the eyes only moderate in size, the sides behind them parallel for a long distance, the basal angles broadly rounded, the punctures minute, rather close-set toward the sides and base; prothorax parallel, nearly a fourth longer than wide, with all the angles about equally rounded, obviously narrower than the head, somewhat coarsely but feebly and sparsely punctate; elytra notably elongate, parallel, one-half wider, and about two-fifths longer than the prothorax, finely, feebly and not very densely punctate; gular sutures very fine, rather widely separated, diverging also toward base as usual, the intermediate surface apparently in slight relief and more shining and less reticulate than the remainder. Male secondary characters nearly as in *punctatus*, the truncate lobe of the fifth segment still larger. Length 2.75 mm.; width 0.5 mm. California (Humboldt to Sonoma Co.)..**pallidus** n. sp.

Body black or piceous-black in color.. 9

9 — Elytra gradually paler posteriorly..10

Elytra uniformly colored, either black or piceous, concolorous............11

10 — Form nearly as in *punctatus*, the prothorax relatively shorter and the elytra longer, black in color, the legs blackish with the tarsi paler, the elytra gradually and very nubilously rufescent toward tip; surface shining, the reticulation subobsolete on the pronotum; head of the usual form, the eyes well developed, the punctures fine but unusually strong; antennae moderate, with joints two to four decreasing rapidly in length; prothorax unusually small, sparsely and very feebly though more coarsely punctate, only slightly longer than wide, parallel and straight at the sides, distinctly narrower than the head, the obtuse anterior angles at apical fourth or fifth; elytra unusually elongate, parallel, one-half wider and three-fifths longer than the prothorax; gular sutures moderately separated, very fine, the intermediate surface apparently somewhat concave, more shining and less reticulate than the remainder of the under surface. Male unknown. Length 3.0 mm.; width 0.63 mm. Arizona (Pinal Mts.)..................**pinalinus** n. sp.

Form rather shorter, black, the legs piceous-black, the tibiae and tarsi gradually paler, brown, the elytra gradually very nubilously piceous toward tip, especially toward the suture; surface polished with the reticulation obsolete; head as in the preceding species, slightly elongate, parallel for a long distance behind the eyes to the broadly rounded angles; prothorax distinctly longer than wide, obviously narrower than the head, subparallel and nearly straight at the sides, rather coarsely, sparsely and only moderately strongly punctate; elytra unusually short, but little longer than wide, the sides very feebly diverging from the base, becoming slightly arcuate posteriorly, about one-half wider than the prothorax but only about a third longer, finely, feebly and rather sparsely punctate; gular sutures moderately separated but obliterated, the intermediate surface not differing materially from the remainder. Male unknown. Length 2.9 mm.; width 0.55 mm. California (Humboldt Co.)...........**deceptor** n. sp.

11 — Male with the posterior margin of the fifth ventral segment lobed in the middle...12

Male with the posterior margin of the fifth segment not distinctly lobed..13

12 — Body rather slender, deep polished black throughout, the legs blackish with the tibiae and tarsi gradually paler; reticulation obsolete; head distinctly elongate, with broadly rounded sides basally, the base truncate, the punctures minute but perforate as usual, rather sparse; prothorax very distinctly narrower than the head and obviously longer than wide, more coarsely but sparsely and more or less strongly punctate, parallel and nearly straight at the sides, the apical angles broadly rounded and more than a fifth from the apex; elytra distinctly elongate, parallel, large, about three-fifths wider and longer than the prothorax; gular sutures rather less widely separated than usual and almost completely obliterated. Male with the fifth segment strongly lobed at the middle, the lobe much wider than long, about a fourth as wide as the segment and broadly, transversely truncate at apex, the adjoining surface ovally and somewhat feebly impressed in apical half, the sixth segment with a large angulate notch, somewhat deeper than wide and narrowly rounded anteriorly, with its diverging sides feebly sinuate posteriorly, the surface of the segment narrowly and feebly impressed around and in front of the angle. Length 2.8–3.0 mm.; width 0.5–0.6 mm. California (Truckee, Sonoma and Monterey), Nevada (Reno), Oregon (Albany, Newport and the Dalles) and at various localities in Washington State. **punctatus** Csy.

Body nearly as in *punctatus* but more slender and very much smaller, deep polished black throughout, the entire legs and antennae more or less pale brown; head nearly as in *punctatus* but not quite so elongate, the prothorax relatively still narrower and more elongate, as long as the head but much narrower, the sides parallel and straight, the punctures sparse and feeble; elytra relatively narrower and more elongate, parallel, about two-fifths wider and longer than the prothorax, shining and finely, rather sparsely punctate. Male with the secondary characters nearly as in *punctatus*, the lobe of the fifth segment smaller, though equally strong, and not more than a fifth as wide as the segment, more rounded and less truncate at apex, the surface more strongly and cylindrically impressed almost to the base of the segment; notch of the sixth segment almost similar but with its anterior angle rather less narrowly rounded. Length 2.6 mm.; width 0.4 mm. California (Mokelumne Hill, Calaveras Co.), — Dr. Blaisdell.......................**filius** n. sp.

Body moderately slender, deep and shining black throughout, the femora and tibiae blackish, the tarsi and antennae paler, brown; reticulation subobsolete; head as usual, the eyes very well developed; prothorax distinctly longer than wide, much narrower than the head, the sides subparallel and nearly straight, sparsely punctulate, the anterior angles about a fifth from the apex and broadly rounded; elytra notably elongate, one-half wider and longer than the prothorax; gular sutures obliterated, rather widely separated, the intermediate surface polished and smooth, the feeble reticulation of the remainder of the surface being obsolete. Male secondary characters of the sixth segment nearly as in *punctatus*, the hind margin of the fifth having a very short, broadly and evenly rounded lobe in median fifth or sixth, the surface not impressed but having a feeble rounded tumor on the median line at apical third. Length 2.7 mm.; width 0.53 mm. California (Sta. Cruz and San Mateo Cos.). **distinctus** n. sp.

13 — Notch of the sixth segment large, deep and angulate as in *punctatus*, the segment also feebly impressed in front of the emargination as in that species; fifth segment broadly, feebly sinuato-truncate and feebly impressed. Body slender, black or piceous-black in color, shining; head of the usual form, parallel, the antennae gradually and distinctly thickened toward tip; prothorax much narrower than the head, distinctly elongate, parallel, the anterior angles broadly rounded and at apical fourth or fifth, the punctures sparse and feeble; elytra parallel, distinctly elongated, two-fifths wider but only about a third longer than the prothorax; gular sutures fine but evident, moderately separated, the intermediate surface plane and not differing in sculpture. Length 2.75 mm.; width 0.5 mm. California (Pomona and San Bernardino). **fraternus** Fall

Notch of the sixth segment in the form of a broadly rounded simple sinus, wider than deep. Body piceous-black, the abdomen black, the legs brown throughout, shining, the head and pronotum finely but distinctly reticulate, the punctures sparse and almost completely obsolete, those of the elytra fine and sparse; head but slightly elongate, the antennae more slender than in *fraternus* and scarcely visibly incrassate distally; prothorax but little longer than wide, much narrower than the head, parallel, the anterior angles broadly rounded and at apical fourth or fifth; elytra distinctly longer than wide, parallel, one-half longer and wider than the prothorax; gular sutures well separated but almost wholly obliterated, the intermediate surface but little smoother than the remainder and becoming broadly concave toward base. Male with the fifth segment broadly, feebly impressed along the middle throughout the length, the apical margin transversely truncate, with a narrow and very feeble arcuation at the middle but scarcely lobed; sixth segment with a broad rounded sinus between two and three times as wide as deep, the surface adjoining anteriorly with a triangular impression having abruptly defined side margins. Length 2.7 mm.; width 0.5 mm. California (Siskiyou Co.) ....**shastanus** n. sp.

14 — Rather slender, deep polished black throughout, the reticulation of the head and pronotum wholly wanting, the legs and antennae pale brown, the femora dusky; head scarcely at all longer than wide, of the usual

form and sculpture, the antennae slender and only just visibly incrassate distally; prothorax obviously narrower than the head and distinctly longer than wide, the nearly straight sides just perceptibly converging from the broadly and obtusely rounded anterior angles — at apical fourth or fifth — to the base; elytra convex, polished, finely, sparsely punctured, only very slightly longer than wide, not quite one-half wider and only about a fourth longer than the prothorax; gular sutures subobliterated. Male with the fifth segment wholly unimpressed, the apex broadly, feebly sinuato-truncate; sixth segment with a rounded sinus between two and three times as wide as deep, the adjoining surface feebly impressed in the middle, the impression gradually evanescent anteriorly. Length 3.0 mm.; width 0.5 mm. California (Dunsmuir), — Mr. Wickham........................**cervicula n. sp.**

Fifth segment of the male lobed in the middle at apex and longitudinally impressed, the impression longitudinally divided at base by a short median raised line and becoming posteriorly a spoon-shaped depression, limited at the sides by acutely elevated folds; sixth ventral with a deep oblong-elliptical emargination, which is widest at the middle of its depth, the surface in front of the emargination with a triangular impression having abruptly limited side margins; hind femora stouter than usual and fully as broad as the anterior. California (Marin Co.).
femoratus Fall

I am obliged to place *femoratus* at the end of the table, as no characters are given under the original description enabling me to coördinate it with the other species. Its sexual characters are so distinct that there will be no trouble in identifying the male if found. *Robustulus* closely resembles *punctatus* but is larger and stouter and has the legs notably stouter. A specimen from Truckee, before me, may possibly represent the *montanus*, of Fall, but it seems to be rather smaller, being 2.8 by 0.55 mm. in size, the prothorax obviously narrower than the head, although less so than in most of the species, and the triangular notch of the sixth segment is wider than deep, with its anterior angle well rounded, the transversely rounded part being about a fourth as wide as the entire notch. *Pallidus* has male sexual characters greatly resembling those of *punctatus*, but the less abruptly truncate lobe of the sixth segment is relatively still larger, being nearly a third as wide as the segment and the gular sutures are more widely separated; these characters, in conjunction with the smaller size and different coloration, will readily distinguish the two species, which are both represented by good series. In the type specimen of *punctatus* there is a small and feeble tumidity on the surface between the gular sutures just behind the support of the mentum, which is probably homologous with the subspiniform process, in the same position, generally characterizing *Pycnorus;* it seems to be an inconstant character in *Pycnorus* and is extremely rare in *Orus* and probably of sporadic or accidental occurrence, as I have only noticed it in this single specimen out of many examined.

Scopaeus Er.

Renewed comparisons of the European and American species — the latter separated by the writer under the name *Leptorus,*— impels him to reverse his former opinion and to unite these with *Scopaeus.* The genus *Scopaeus* will thus include all the European Scopaei and the equally numerous American species, as described in the table given below, as well as a number of Mexican and Central American species made known by Dr. Sharp; possibly also many forms inhabiting other parts of the world. Thus extended in geographical distribution, as well as numbers, some variability in generic characters might be anticipated but this seems to be comparatively unimportant. The European species are more linear and parallel, with less apical anterior thoracic angles, as a rule, than the American and with the suture separating the pronotal hypomera better developed; in addition the basal joint of the hind tarsi is generally more decidedly longer than the second. In the American species the basal joint is usually subequal to the second, but in *picipes* it is notably longer than the second as in the European forms, and, in at least one European species before me, the two basal joints are equal. The sculpture of the European species is generally coarser and less dense than that of the American, but I can find no character of sufficient importance or constancy to warrant generic separation. The large spongy-pubescent fovea immediately above each eye is present throughout but rather more developed in the European species. It is singular that representatives of so widely distributed a genus should be wanting in the true Pacific coast faunal region of the United States, if we except the extreme southern part of California, and this is rather conclusive evidence that the genus migrated from America to Europe, or the reverse, by way of Greenland, rather than by the usual Alaskan route and probably indicates a European rather than American origin. The species inhabiting our territory, known to me thus far, may be distinguished by the following outline descriptions:—

Elytra subequal to or longer than the prothorax........................2
Elytra more or less distinctly shorter than the prothorax...............18
2 — Male with a subparallel-sided, narrow notch at the apex of the sixth ventral segment, the bottom of the notch broadly and transversely rounded.. 3
Male with a broad emargination occupying virtually the entire apex of the sixth segment, the notch having the form of an incised cusp, the widely diverging sides of the emargination being broadly arcuate 4
3 — Form parallel, the lustre feebly shining, pale brownish-testaceous throughout, except the elytra, which are dusky and the abdomen blackish-piceous; head moderate, convex, slightly longer than wide, the sides parallel and straight behind the well developed convex eyes; base broadly sinuato-truncate, the angles rather narrowly rounded; occiput not impressed, the punctures minute but deep, dense; prothorax distinctly though not very greatly narrower than the head, about a fifth longer than wide, the anterior angles obtuse but very evident and at apical fourth, the sides thence very feebly converging and almost straight to the moderately rounded basal angles; surface more shining than the head, the very minute punctures feebler and less close-set, feebly bi-impressed at the basal margin; elytra nearly a fifth longer than wide, parallel, two-fifths wider and about a third longer than the prothorax, very minutely, closely, subasperately punctate; gular sutures well separated. Male with a small subparallel-sided notch somewhat deeper than wide at the apex of the sixth ventral, the bottom of the notch broadly rounded with the edge beveled or concave. Length 2.6 mm.; width 0.45 mm. Texas (El Paso) and New Mexico, — Mr. Wickham..**texanus** Csy.
Form less parallel, the elytra relatively much wider, similar in coloration, the lustre alutaceous, the minute sculpture rather denser; head well developed, but little longer than wide, larger than in *texanus* but otherwise nearly similar; prothorax relatively smaller and narrower, much narrower than the head, fully a fifth longer than wide, similar to that of *texanus*, except that the basal angles are more broadly rounded and the two basal impressions more approximate; elytra subquadrate, parallel, only just visibly longer than wide, one-half wider than the prothorax but only about a fourth longer; gular sutures more approximate, the punctures of the under surface of the head denser and more

asperate. Male having a notch at the apex of the sixth ventral similar to that of *texanus* but much less deep, rather wider than deep. Length 2.8 mm.; width 0.5 mm. Arizona (Yuma), — Mr. Wickham. **gilensis** n. sp.

4 — Occiput finely cleft at the middle of the base; anterior angles of the prothorax sometimes more rounded and less apical than usual; gular sutures narrowly separated.. 5

Occiput not modified at base or, rarely, slightly and broadly impressed at the middle; gular sutures more or less widely separated............ 6

5 — Body stout and parallel, very densely punctulate and dull in lustre, dark piceous-brown in color, the head rather darker, the legs and antennae very pale; head large, scarcely at all longer than wide, of the usual form otherwise, the eyes well developed and convex; antennae as long as the head and prothorax combined; prothorax slightly longer than wide, very much narrower than the head, parallel and nearly straight at the sides, the anterior angles obtuse but only very slightly rounded and somewhat behind apical fourth; elytra parallel, about a fifth longer than wide, scarcely two-fifths wider than the prothorax and one-third longer; gular sutures very approximate, the intermediate surface concave anteriorly, the under surface of the head flat, finely but strongly, extremely densely punctulate. Occipital cleft very fine. Male unknown. Length 2.4 mm.; width 0.5 mm. Alabama. **crassulus** n. sp.

Body parallel but less stout and rather more convex, dark piceous-brown in color, the head and abdomen blackish, the legs and antennae pale throughout; head extremely densely punctured and dull, the pronotum and elytra less densely so and feebly shining; head nearly as in the preceding species, the eyes rather less developed and the antennae decidedly shorter, thicker and more incrassate distally, much shorter than the head and prothorax combined; prothorax narrower and more elongate, nearly a third longer than wide, much narrower than the head, the sides distinctly converging and feebly arcuate from the very obtuse and rather broadly rounded anterior angles — situated nearly at apical third — to the broadly rounded basal angles, the disk broadly impressed at each side of the median line toward base; elytra evidently longer than wide, about a third wider and one-fifth longer than the prothorax; gular sutures slightly less approximate, the intervening surface nearly flat. Occipital cleft rather coarse, deep and distinct. Male unknown. Length 2.7 mm.; width 0.45 mm. North Carolina (Asheville).......................................**carolinae** n. sp.

6 — Eyes but slightly convex, not distinctly prominent and unusually small. Body very small, slender and parallel, rather shining, the punctures throughout very minute and sparse, the pronotum less shining because of stronger micro-reticulation; color pale flavo-testaceous throughout, the abdomen slightly dusky excepting toward apex; head narrow, unusually elongate, the sides parallel, gradually becoming arcuate basally, the base narrower than the disk, the angles obtuse but only slightly rounded; prothorax distinctly elongate, nearly as long as the head and only slightly narrower, the sides very feebly converging from the obtusely rounded anterior angles at apical fifth or sixth to the

rather broadly rounded basal angles and nearly straight; elytra small, only slightly longer than wide, but little wider than the head, about a fourth wider than the prothorax but only just visibly longer; pronotal hypomera very narrow and feebly developed. Male unknown. Length 1.9 mm.; width 0.32 mm. Texas (Austin)..............**longiceps** Csy.

Eyes always convex and more or less conspicuously prominent.......... 7

7 — Elytra much longer than the prothorax............................ 8

Elytra but slightly longer than the prothorax..........................13

8 — Punctures of the under surface of the head rather coarse. Body very slender, piceous, the head and prothorax dark rufous, the legs and antennae paler; surface rather more shining than usual; sides of the prothorax slightly converging from the anterior angles; elytra fully one-third longer than the prothorax. Length 2.2 mm. California (Pomona)..**longipennis** Fall

Punctures of the head above and beneath very fine as usual.............. 9

9 — Legs piceous in color, the tarsi paler. Body subparallel, the elytra much wider than the head, black or blackish throughout, the antennae dusky; integuments strongly alutaceous; head moderately developed, of the usual form, the basal angles well rounded; prothorax distinctly longer than wide and narrower than the head, subparallel at the sides, the anterior angles rather broadly rounded and at apical fourth; elytra obviously longer than wide, parallel, two-fifths wider and fully a fourth longer than the prothorax, parallel and nearly straight at the sides, the suture frequently finely rufous; gular sutures only moderately separated. Length 2.3 mm.; width 0.45 mm. Sea-beaches of New Jersey, Florida (Biscayne Bay) to Texas (Galveston)............**picipes** Csy.

Legs invariably very pale in color throughout..........................10

10 — Body in great part piceous or blackish in color.....................11

Body pale testaceous, the abdomen sometimes dusky.....................12

11 — Body larger and subparallel, the elytra much wider than the head, the elytra and abdomen throughout black or blackish, the head and prothorax very dusky and dark rufo-testaceous, the elytral suture generally somewhat rufescent; lustre feebly shining; head well developed, somewhat distinctly longer than wide, the basal angles well rounded, the eyes prominent and conspicuous; antennae rather slender, much shorter than the head and prothorax combined; prothorax evidently elongate and narrower than the head, the sides subparallel and nearly straight, the anterior angles obtuse and slightly rounded and at apical fourth; elytra distinctly longer than wide, two-fifths wider and about a fourth longer than the prothorax; gular sutures moderately separated. Notch of the sixth male ventral notably deep. Length 2.6 mm.; width 0.45 mm. Arizona (Tuçson) and Texas (Austin and Waco).
arizonae n. sp.

Body parallel, the elytra being only slightly wider than the head, feebly shining, piceous-black throughout, except the prothorax, which is somewhat dusky rufo-testaceous, and the outer apical angles of the elytra, which are nubilously pale; head rather large, not longer than wide, of the usual parallel form and with somewhat narrowly rounded basal angles, the antennae, as usual, much shorter than the head and prothorax; eyes prominent but only moderate in size; prothorox only very slightly longer than wide and but little narrower than the head, parallel and straight at the sides from the obtuse and slightly rounded angles at apical fifth to the rather broadly rounded basal angles, the longitudinal impression at each side of the median line in basal third distinct; elytra somewhat longer than wide, about a third wider and one-fourth longer than the prothorax; gular sutures rather widely separated, the under surface of the head broadly and feebly convex, shining, finely, rather sparsely punctulate. Male secondary characters as in *arizonae*. Length 2.4 mm.; width 0.4 mm. Iowa to Lake Superior. **notangulus** n. sp.

12 — Form slender and parallel, the elytra being but little wider than the head; abdomen piceous, gradually paler at tip; surface noticeably shining, the minute punctules only moderately close-set throughout; head well developed, as wide as long, parallel or subparallel at the sides, the eyes moderately large, convex and prominent, the base distinctly sinuato-truncate, the angles moderately rounded; antennae rather short; prothorax but little longer than wide, obviously although not greatly narrower than the head, the sides distinctly converging and straight from the obtuse but scarcely at all rounded angles near apical fifth, to the feebly rounded basal angles, the median line slightly and obtusely elevated very near the base; elytra relatively small, slightly longer than wide, not quite a fourth wider and about one-fifth longer than the prothorax, the sides just visibly diverging from the basal angles; gular sutures widely separated, the under surface of the head sparsely punctulate and shining though feebly reticulate. Broadly angulate notch of the sixth male ventral much shallower than in the preceding species but of the same form. Length 2.1–2.4 mm.; width 0.3–0.35 mm. Texas (Austin). [= *bicolor* Csy.]................**versicolor** Csy.

Form less slender and not parallel, the elytra much wider than the head, pale dusky-testaceous throughout, the prothorax rather brighter rufous; surface somewhat strongly shining; head well developed, as wide as long, the eyes rather large, prominent; antennae slender, but little shorter than the head and prothorax, pale in color; prothorax relatively small, notably elongate, much narrower than the head, the sides very slightly converging and not quite straight from the obtuse and rather broadly rounded angles near apical fourth, to the less obtuse but rounded basal angles, the median line prominent only very near the base; elytra unusually developed, a fourth longer than wide, about two-fifths wider and a third longer than the prothorax; gular sutures moderately separated, rather deeper than usual, the under surface of the head rather closely and strongly punctulate. Male unknown. Length 2.3 mm.; width 0.45 mm. New York (Hudson Valley). **hudsonicus** n. sp.

13 — Species of the Atlantic coast regions..................................14

Species of the Sonoran region..17

14 — Head but little longer than wide, body only moderately slender.....15

Head elongate; body extremely slender..16

15 — Body parallel, alutaceous in lustre, the abdomen black or blackish, feebly paler toward tip, the head and elytra blackish-piceous, the prothorax dusky testaceous, the legs and antennae pale throughout; head

of the usual form, very minutely, densely punctulate and rather strongly, more sparsely so beneath; antennae obviously shorter than the head and prothorax, the latter slightly longer than wide and usually but little narrower than the head, the sides subparallel or very feebly convergent from the obtuse and slightly rounded angles at apical fourth or fifth, the punctures less dense than those of the head; elytra not or but very slightly longer than wide, much wider than the head, parallel, about a fourth wider but only just visibly longer than the prothorax; gular sutures well separated. Length 2.4 mm.; width 0.4 mm. Rhode Island and New York (Hudson Valley)..................**exiguus** Er.

Body resembling *exiguus* in coloration but smaller and rather more slender, alutaceous as usual, the punctures of the under surface of the head smaller and feebler; head, antennae and prothorax nearly similar, the elytra however relatively much narrower and only just visibly wider than the head, parallel, quite distinctly longer than wide, scarcely more than a sixth wider and but slightly longer than the prothorax, sculptured as usual. Length 2.3 mm.; width 0.35 mm. North Carolina (Asheville)....................................**macilentus** n. sp.

Body somewhat resembling the two preceding in form and sculpture but with the prothorax relatively narrower and more elongate; color pale flavo-testaceous throughout, the head but slightly, and the abdomen not at all, darker; head well developed, of the usual form; prothorax much narrower than the head and more shining, fully a fifth longer than wide, the sides behind the obtuse and rather broadly rounded angles at about apical fifth subparallel; elytra parallel, only very slightly longer than wide, but slightly though obviously wider than the head, fully a third wider but only just visibly longer than the prothorax. Male unknown. Length 2.3 mm.; width 0.38 mm. New York (Hudson Valley)...**degener** n. sp.

16 — Coloration as in *exiguus;* form parallel, the lustre alutaceous, the pronotum more shining as usual; head distinctly elongate, the eyes larger than usual and situated at obviously less than twice their own length from the base; prothorax much narrower than the head and distinctly elongate, the sides very feebly converging behind the obtusely rounded angles at apical fifth and nearly straight; elytra obviously though not greatly wider than the head, nearly a fifth longer than wide, parallel, about a fourth wider and slightly longer than the prothorax; gular sutures well separated as in the three preceding species. Male unknown. Length 1.8 mm.; width 0.3 mm. North Carolina (Asheville). **angustissimus** n. sp.

17 — Slender, parallel, rufo-testaceous, the elytra and abdomen fuscous, the former with the suture narrowly and indefinitely paler; antennae and legs pale; lustre alutaceous, the pronotum more shining; head slightly longer than wide, of the usual form, densely punctulate; prothorax narrower than the head, a little longer than wide, with the sides behind the strongly obtuse and rounded subapical angles parallel; elytra about a fourth longer than wide, distinctly wider and slightly longer than the prothorax, sculptured as usual. Sixth ventral in the male rather deeply, triangularly emarginate, the emargination as wide

as deep and scarcely rounded at the bottom. Length 1.9–2.4 mm. California (Palm Springs — on the western border of the Colorado Desert). **californicus** Fall

18 — Elytra only slightly shorter than the prothorax. Body slender, parallel, small in size, colored as in *exiguus* and similarly sculptured, the punctures of the rather convex under surface of the head less evident; head well developed, distinctly elongate, parallel at the sides, the convex eyes at twice their length from the base; antennae shorter than the head and prothorax, rather stout and only very feebly and gradually incrassate distally; prothorax much longer than wide, only just visibly narrower than the head, the sides subparallel behind the obtuse and slightly rounded angles at apical fifth; elytra scarcely visibly wider than the head, parallel, slightly elongate, distinctly wider and only very slightly shorter than the prothorax; gular sutures well separated. Length 2.0 mm.; width 0.32 mm. New York, Virginia (Fort Monroe) and Mississippi (Vicksburg)........... **delicatus** n. sp.

Elytra very much shorter than the prothorax........................... 19

19 — Body extremely slender, pale ochreo-testaceous in color throughout; parallel in form, the lustre rather shining and only moderately alutaceous; abdomen faintly dusky except toward tip; head large, but little longer than wide, rather wider near the base than across the eyes, which are convex and at about twice their length from the base as usual; antennae rather thick, much shorter than the head and prothorax, distinctly incrassate distally; prothorax evidently elongate, much narrower than the head, the sides feebly convergent behind the obtuse and somewhat rounded angles, the latter near apical fourth; elytra very small, much narrower than the head, barely as long as wide, scarcely visibly wider than the prothorax and only about three-fourths as long, the sides feebly diverging from the basal angles; abdomen subequal in width to the elytra; gular sutures well separated. Notch of the sixth ventral in the male of the usual form though less deep than in *exiguus*. Length 2.4 mm.; width 0.38 mm. Iowa (Iowa City), — Mr. Wickham. **brachypterus** n. sp.

Body notably stout, parallel, strongly alutaceous, the pronotum more shining.. 20

20 — Color dark piceous, the abdomen blackish, the prothorax, legs and antennae dusky-testaceous; head large, not longer than wide, parallel, the eyes moderate and at fully twice their length from the base; antennae well developed, subequal in length to the head and prothorax, distinctly incrassate distally; prothorax stout and but little longer than wide though obviously narrower than the head, the sides feebly converging and somewhat arcuate behind the obtusely rounded angles at apical fourth; elytra about as long as wide, not quite as wide as the head, very slightly wider than the prothorax and about four-fifths as long; gular sutures well separated. Notch of the sixth ventral of the male normal in form. Length 2.6 mm.; width 0.48 mm. Alabama. **saginellus** n. sp.

Color and general form nearly as in *saginellus*, the anterior parts and legs paler, the pronotum pale testaceous; head large, not longer than wide, the eyes well developed and at barely twice their own length from the base; antennae very much shorter than the head and prothorax, slender and not distinctly incrassate distally; prothorax nearly as in *saginellus* but only very slightly narrower than the head, the anterior angles at apical fifth; elytra smaller, barely as long as wide, slightly narrower than the head, equal in width to the prothorax and barely three-fourths as long, the sides just visibly diverging from the base. Length 2.5 mm.; width 0.45 mm. Texas (Houston)................**quadripennis** n. sp.

A number of female types are included in the above table, but, as the parallel-sided notch of the sixth male ventral is a very exceptional character, all but *texanus* and *gilensis* are assumed to have the broad notch in the form of an acute incised cusp with broadly diverging and arcuate sides. In all the males having the latter type of emargination, which I have been able to examine, the form is very constant, varying only in degree, so that it is seldom mentioned in the descriptions, even when the male is at hand, and I have assumed that the triangular emargination of *californicus*, mentioned by Fall, is really of the same character, though in this case the notch appears to be somewhat deeper than usual. *Arizonae* seems to differ from *californicus* Fall, in its larger size and relatively less slender and parallel outline. *Notangulus* is closely allied to *exiguus* but is distinguished by the notably more elongate elytra, when compared with the prothorax. *Degener* is represented by a single specimen of a very unusual pale and uniform coloration, but exhibiting scarcely any other evidence of immaturity; it is distinguishable from *exiguus*, however, by its narrower and relatively more elongate prothorax. The last three species of the table are of remarkably aberrant form, owing to their very short elytra, but the male sexual characters are of the usual type. *Saginellus* and *quadripennis* are each represented by a single male, the species differing principally in the antennae, relative size of the elytra and prothorax, and, somewhat, in the eyes and relative form and degree of separation of the gular sutures. Both *longipennis* and *californicus* are unknown to me, and the above outlines are derived from the original diagnosis as published by Mr. Fall (Occas. Papers, Cal. Acad. Sci., viii).

Scopaeoma n. gen.

In a certain sense this genus and the two following form a group differing greatly from the broad-necked genera in some peculiarities of sculpture. In *Orus* and related genera, the punctures of the pronotum are very much larger as well as sparser than those of the head, while in *Scopaeoma*, *Scopaeopsis* and *Scopaeodera*, the thoracic punctures are, when present at all, equal to or smaller and sparser than those of the head; but in the first alone are they distinctly visible. In the second all the punctures become so minute as to be nearly invisible and entirely filled by the bases of the fine hairs constituting the pubescence, while in the last the punctuation becomes wholly lost and the surface glabrous. The present genus approaches *Scopaeus* more closely than the other two in the nearly parallel and less convex form of the body and in the much shorter and somewhat thicker tarsi, with a form of the prothorax nearly similar to that of *Pycnorus*. The species are moderately numerous and extend over the entire northern part of the continent from the Atlantic to the Pacific, those known to me being distinguished as follows: —

Head almost semicircularly rounded at base, smaller in size and relatively more elongate.. 2

Head large, broadly truncate at base, scarcely at all longer than wide... 5

2 — Head distinctly wider than the prothorax.............................. 3

Head subequal in width to the prothorax, never more than very slightly wider... 4

3 — Body slender, black, the legs pale brown throughout, the punctures fine and dense, less dense on the pronotum than on the elytra; head elongate, broadly concave between the antennal prominences. Male with a large oval concavity at the apex of the fifth ventral and a subquadrate emargination formed in part by short prolongations of the sides of the concavity, the floor of the concavity smooth, with a narrow, slender, posteriorly inclined, acutely attenuate spine, bearing at each side near its apex a short seta projecting laterally; sixth segment with a simple subparabolic sinus wider than deep and about a third as wide as the segment; middle tibiae somewhat abruptly thickened from behind the middle to the apex. Length 2.9 mm.; width 0.5 mm. Vancouver Island. **brunnipes** Lec.

Body parallel, rather convex, shining, black or slightly piceous in color, the legs piceous-black with the tarsi pale brown, the antennae dark brown;

pubescence throughout short, fine, decumbent and moderately abundant; head longer than wide, finely but strongly, closely punctate, the punctures especially dense toward base and sides; eyes rather small but convex and prominent, at more than twice their own length from the extreme base, the sides behind them parallel for a short distance, then broadly rounding into the semicircular base, which is somewhat subtruncate toward the middle especially in the female; front between the antennal tubercles broadly, strongly impressed; antennae slightly shorter than the head and prothorax, moderately slender, feebly incrassate, the cylindric basal joint much longer than the next two, the succeeding three decreasing slowly in length; prothorax nearly a third longer than wide, distinctly although not very greatly narrower than the head, widest near the middle, the sides subparallel and broadly arcuate, rapidly converging and becoming just visibly sinuate in anterior fourth to the very narrow neck, the punctures sparse, very fine, more distinct and feebly asperate toward base; elytra nearly a fourth longer than wide, very much wider than the head, two-fifths wider and a fourth longer than the prothorax, parallel, the punctures close-set, larger than those of the head and rather strongly asperate; abdomen parallel, slightly narrower than the elytra; legs moderately short and rather slender. Male with a broadly oval deep and distinctly though not acutely limited oval impression, occupying median third of the fifth ventral and extending almost to the base, its floor shining and having, posteriorly, a suberect acutely triangular process; posterior margin of the segment with a large, subquadrate emargination, the acute and subparallel sides of which are in great part formed by acute processes in prolongation of the sides of the impression, the emargination as deep as the length of the impression before it; sixth segment with a large oval impression having a flat floor, the apical margin with a simple rounded sinus about three times as wide as deep; middle tibiae nearly as in *brunnipes*. Length 3.2 mm.; width 0.66 mm. Massachusetts, — Mr. F. Blanchard.........**puritana** n. sp.

Body shining, black in color, almost similar to *puritana*, except that the head is evenly and semicircularly rounded at base and not broadly subtruncate toward the middle and more obviously elongated, with the punctures of the head and prothorax rather more close-set and the transverse impressions at the base of the abdominal segments more pronounced; form very slightly less slender. Male unknown. Length 3.3 mm.; width 0.68 mm. California (Contra Costa Co.).

rotundiceps Csy.

4 — Form, color and sculpture nearly similar to *brunnipes* but more slender and elongate, the legs piceous-brown throughout; head narrower and more elongate, the sides straight and parallel for half the distance from the eyes to the extreme base, measured longitudinally, then almost evenly and semicircularly rounded, feebly subtruncate toward the middle of the base; prothorax only just visibly narrower than the head; elytra narrower and more elongate, the sides parallel. Male having secondary sexual characters nearly similar to those of *brunnipes*, except that the prolongations of the apex of the fifth ventral — forming the sides of the large subquadrate emargination — are flexed more strongly inward toward tip, that the large oval flat impression of the sixth segment is

longitudinally divided anteriorly by a tumid ridge and that the sinus at the apex is rather smaller and about twice as wide as deep. Length 3.7 mm.; width 0.55 mm. Colorado (Salida), — Mr. Wickham.
procera n. sp.

Form nearly similar to the preceding, slender, polished, black, the legs black with the tarsi pale; head narrow, elongate, the sides parallel for rather more than half the longitudinal distance from the eyes to the middle of the base, then semicircularly rounded, not subtruncate medially; prothorax about equal in width to the head, elongate, the sides subparallel, broadly arcuate, very obtusely subangulate at apical fourth; elytra parallel, evidently elongate, nearly one-half wider and a fourth longer than the prothorax, impressed on the suture behind the scutellum; legs rather slender. Male having a deep and elongate-oval impression occupying median third of the fifth ventral and extending virtually to the base, the posterior margin with a transverse emargination, the sides of which are formed by rather short obtuse prolongations of the sides of the impression, the emargination not quite one-third as deep as the length of the impression before it, the posterior margin of the impression very feebly lobed and pubescent at the middle but without an acute subelevated process; sixth segment with a large simple apical sinus about three times as wide as deep, the surface before it apparently somewhat impressed. Length 3.4 mm.; width 0.55 mm. Nevada (Reno)..............................**angusticeps** n. sp.

5 — Body elongate, parallel, somewhat stouter than *angusticeps*, shining, black, the legs and antennae red-brown throughout; head well developed, rather wider just before the basal angles than across the eyes, the latter at nearly three times their own length from the base, which is broadly, transversely truncate, the angles moderately broadly rounded; prothorax elongate-oval, scarcely three-fourths as wide as the head, rapidly narrowed anteriorly as usual; elytra notably elongate, parallel, nearly one-half wider and a third longer than the prothorax, the punctures fine and scarcely at all asperate; abdomen subparallel, much narrower than the elytra and not quite as wide as the head. Male unknown. Length 3.9 mm.; with 0.63 mm. California (Mendocino Co.)......................................**truncaticeps** Csy.

The description of *brunnipes*, given above, is from some pencil notes taken by the author some years ago from the original type. It is a smaller and more slender species than the eastern *puritana*, the latter differing also in having the spiniform process of the fifth ventral broader, more triangular and pubescent, though having the same subterminal single lateral setae, and the sinuation of the sixth segment is smaller and rather more broadly rounded. The spiniform process in *brunnipes*, as well as the posterior part of the concavity, is completely glabrous. The Californian *rotundiceps* Csy., is similar but larger and has the legs colored as in *puritana*. I have assumed that the head in *brunnipes* is distinctly wider than the prothorax but appear to have made no note on this point; the original description of LeConte is wholly inadequate. The species described in the table under the name *angusticeps* is founded upon a specimen which I formerly regarded as the male of *rotundiceps* (Bull. Cal. Acad. Sci., 6, p. 218) but more careful comparisons indicate the impropriety of this association. There are before me two forms allied closely to *brunnipes*, which are left undescribed for the present; they occur at Lake Superior and in Montana (Kalispell).

Scopaeopsis n. gen.

This genus is one of the most isolated of the Scopaei, not only in general habitus and comparatively large size of its species, but by reason of labral structure, long slender tarsi — a character shared only with *Scopaeodera* — and elaborate secondary sexual modifications of the male. The integuments are clothed rather sparsely with very fine short and decumbent hairs and the punctures are, except on the elytra of certain species, excessively minute or subobsolete, being practically filled by the bases of the minute hairs. The species are moderately numerous, inhabiting the entire eastern parts of our territory, not known to me to extend west of the 100th meridian and entirely unknown to the Sonoran and Pacific coast faunas. The five species in my cabinet may be indicated as follows:—

Elytra large, as wide as the head or wider..............................2
Elytra smaller, more or less distinctly narrower than the head; male sexual characters complex..............................5
2 — Male sexual modifications comparatively simple..............................3
Male sexual characters complex; elytral punctures stronger and rugose...4
3 — Subparallel, rather convex, moderately shining, the pale pubescence rather conspicuous, piceous-black, the head and pronotum dusky testaceous, the antennae dusky, pale toward tip; legs slender, the femora pale honey-yellow, the knees, tibiae and tarsi dusky or piceous; head scarcely longer than wide, the eyes well developed, convex and prominent, at about twice their length from the base, measured longitudinally as usual, the sides behind them very feebly converging, then broadly rounded into the semicircular base; antennae not as long as the head and prothorax, slender, not distinctly incrassate, the joints much more

cylindric in form than in the other genera, the basal joint long, not quite equaling the next three combined; prothorax distinctly elongate, three-fourths as wide as the head, broadly rounded and subparallel at the sides, the latter more strongly converging and becoming very feebly sinuate to the nuchal collar which is half as wide as the base; elytra parallel, distinctly longer than wide, very slightly wider than the head, nearly a third wider and one-fourth longer than the prothorax, the apical margin narrowly and abruptly yellow in color; abdomen throughout very much narrower than the elytra, at base four-fifths as wide as at the apex of the fourth segment. Male with ventrals two, three and four narrowly and simply impressed in the middle, the fifth not distinctly modified, the sixth with a very large notch occupying its entire width and three or four times as wide as deep, the notch having the form of an incised cusp with widely diverging arcuate sides and with the angle right and not rounded, the surface scarcely at all impressed. Length 3.8 mm.; width 0.7 mm. District of Columbia, North Carolina (Asheville) and Mississippi (Vicksburg).....**opaca** Lec.

4 — Body elongate, subparallel, convex, rather shining with the elytra and abdomen duller, piceous-black throughout, the narrow apical margin of the elytra and the legs throughout pale honey-yellow, the antennae similar in color, the funicle dusky toward base; head scarcely as long as wide, the eyes well developed and prominent, the sides behind them parallel for about their own length, then broadly rounded into the truncate base; antennae slender, feebly incrassate; prothorax shorter and stouter than in *opaca* but otherwise nearly similar, about four-fifths as wide as the head, rapidly narrowed in apical third; elytra parallel, much longer than wide, equal in width to the head, about a fourth wider and longer than the prothorax; abdomen at the apex of the fourth segment equal in width to the elytra, much narrower at base. Male with ventrals two to five strongly impressed along the middle, the impressions increasing in width from a sixth or seventh as wide as the segment on the second to nearly one-half the total width on the fifth, those of segments two to four nearly similar in character and abruptly limited at the sides, that of the fourth with a small tooth at each side at apex and a larger acute tooth in the middle very near the apex, that of the fifth broadly oval, nearly flat, with the sides strongly convex but not acute, the apex broadly sinuate along the impression; sixth segment broadly, biobliquely impressed, the apex with a large simple subangulate sinus about three times as wide as deep. Length 3.9 mm.; width 0.65 mm. Texas (Galveston)........................**elaborata** n. sp.

Body similar to that of *elaborata* but shorter and slightly stouter, pale dusky testaceous in color throughout, the antennae concolorous, feebly paler distally, the apical margin of the elytra and entire legs pale honey-yellow; head relatively larger, the basal angles still more broadly rounded; prothorax somewhat smaller and less stout, elongate, rapidly narrowed at apex as usual and scarcely three-fourths as wide as the head; elytra shorter and relatively wider, but little longer than wide, equal in width to the head; abdomen narrow at base, more rapidly broadening posteriorly. Male unknown. Length 3.5 mm.; width 0.7 mm. Central Texas......................................**pallens** n. sp.

5 — Form slender, convex, rather shining, the elytra and abdomen dull in lustre, piceous-black, the head, prothorax and entire antennae dusky testaceous, the legs paler, flavo-testaceous throughout; head large, the eyes moderately developed, the sides behind them very feebly converging and nearly straight for a long distance, then broadly rounded into the broadly subtruncate base; front not impressed; prothorax large, elongate-suboval, three-fourths as wide as the head and of the usual form; elytra small, very finely but densely, asperately punctate, parallel, slightly longer than wide, much narrower than the head, scarcely visibly wider than the prothorax and equal in length to the latter; abdomen at base very nearly as wide as the elytra, rapidly broadening posteriorly, and, at the apex of the fourth segment, much wider than the elytra and as wide as the head. Male with sexual modifications nearly similar to those of *elaborata* but differing in having the medial tooth of the impression of the fourth ventral more anterior in position and somewhat distant from the transversely rectilinear apical edge of the depression and in having the broad shallow impression of the fifth ventral transversely oblong with parallel and much straighter sides, the apex along the impression broadly and triangularly emarginate throughout the width of the latter; subtriangular sinus of the sixth segment larger, but little more than twice as wide as deep. Length 3.5-3.8 mm.; width 0.6-0.65 mm. New York (Long Island) and North Carolina (Asheville)..**ventralis** n. sp.

Form rather less slender but otherwise nearly similar throughout to *ventralis*, the coloration similar; head relatively smaller though more elongate, rather longer than wide, the base evenly, semicircularly rounded throughout, becoming parallel for a short distance behind the eyes; prothorax large, nearly five-sixths as wide as the head, longer than wide, strongly rounded at the sides; elytra relatively larger than in *ventralis*, but little narrower than the head and slightly wider than the prothorax, equal in length to the latter, longer than wide, parallel, minutely, densely and asperately punctate; abdomen at base but little narrower than the elytra, moderately broadening posteriorly, at the apex of the fourth segment rather wider than the head. Male having sexual characters similar in general to those of *ventralis*, the teeth at the sides of the apex of the impression of the fourth ventral much smaller and not at all conspicuous, the medial tooth more elongate but not very much more posterior in position, the impression of the fifth segment nearly similar in form and extent but with its posterior margin feebly and subcircularly sinuate toward the middle, the sinus of the sixth ventral nearly similar but rather smaller and shallower, the surface feebly and biobliquely impressed. Length 3.9 mm.; width 0.68 mm. Ohio (Cincinnati), — Mr. Charles Dury...................**duryi** n. sp.

The coloration of the legs in *opaca* — which was originally described as an *Echiaster*,— is inconstant, some specimens having them a uniform clear honey-yellow throughout, while others have the tibiae almost piceous-black and the tarsi but slightly paler. Although *pallens* is represented by the female only, I have before me two specimens which are mutually perfectly similar and its pale color is doubtless a specific character.

Scopaeodera Csy.

Among the genera of Scopaei having the basal joint of the hind tarsi elongated — a peculiar and very interesting series, apparently most highly developed in the American continents, — *Scopaeodera* is greatly isolated in habitus because of the highly polished, glabrous and subimpunctate integuments and presence of long stiff tactile setae. The species also differ from the others in their comparatively simple secondary male sexual characters and in having the middle pair of labral teeth alone developed, the exterior teeth being obsolete or extremely minute. They are almost exclusively tropical in range and in all probability numerous, but only two have been discovered thus far in our southwestern territories. A number of them were described by Dr. Sharp in the "Biologia" as *Scopaeus*, under group "4," and the Colombian *pulchellus* Er. and Amazonian *distans* Shp., among others, also belong here. Our two species may be readily identified by the following characters: —

Form rather slender, notably convex, polished throughout and pale flavo-testaceous in color, each elytron clouded with piceous-black behind the middle except at apex, the abdomen also largely blackish toward tip; erect tactile setae sparse, shorter on the elytra and in the single transverse discal series of the abdominal segments; elytra with long, coarse suberect and very sparse hairs in addition, the abdomen with very fine and moderately close-set pale pubescence; head rather small, longer than wide, the eyes large, convex and prominent, at a little less than twice their length from the base, the sides behind them converging and straight for a short distance, then very broadly rounded into the subtruncate median parts of the base; antennae moderately thick, feebly incrassate, not as long as the head and prothorax, with the cylindric basal joint longer than the next two together; prothorax very slightly narrower than the head, longer than wide, widest and obtusely subangulate laterally at apical fourth, the sides thence gradually converging and broadly arcuate to the base and very rapidly converging and feebly sinuate to the narrow neck, the surface strongly convex, impunctate; elytra slightly elongate, parallel and broadly arcuate at the sides, nearly one-half wider and a fourth longer than the prothorax and very much wider than the head, broadly convex, impressed on the suture toward base; abdomen toward base much narrower than the elytra but rapidly broadening, so that the apex of the fourth segment is somewhat wider than the elytra, the fifth segment obtrapezoidal and nearly as long as the two preceding combined; legs slender. Male with the fifth ventral unmodified, the sixth having a triangular incisure at apex about one-half deeper than wide, the surface feebly impressed in prolongation thereof. Length 3.2 mm.; width 0.55 mm. Texas (Houston and Luling) ....**nitida** Lec.

Form, sculpture and coloration almost completely similar to *nitida*, the dark subapical cloud of the abdomen usually confined to the discal parts of the fifth segment only and the general color rather paler than in *nitida;* head nearly similar but with much less broadly rounded basal angles, the truncate part of the base wider and more transverse; prothorax nearly similar, the elytra larger and relatively more elongate, the abdomen notably broader and less dilated posteriorly, the fifth segment much shorter than the two preceding. Male with the fifth ventral unmodified, the sixth having a moderately large notch at apex, the emargination triangular with straight sides and angulate apex and nearly twice as wide as deep, the adjacent surface not at all impressed. Length 3.1 mm.; width 0.6 mm. California (Yuma and the Needles).**sonorica** n. sp.

These species are both rather abundant and somewhat resemble certain ants in their movements and coloration. *Nitida* was originally described under the generic name *Echiaster*.

STILICI.

The few generic types of this well-marked subtribe are remarkably consistent in the form of the tarsi, neck and gular sutures and differ among themselves principally in modifications of the labrum, maxillary palpi, prosternum and sculpture of the integuments. The hind tarsi are more or less elongate throughout, with the basal joint always distinctly longer than the second and sometimes as long as the next two combined but varies considerably in relative elongation, even within the limits of *Stilicus* itself. The neck is always very slender and not variable in width, as it is in the Scopaei, and the gular sutures are invariably coalescent and unified at least toward base. The anterior tarsi are generally very slightly dilated and spongy-pubescent beneath. The genera known to me may be briefly described as follows: —

Labrum broadly rounded or subtruncate at apex, the teeth two in number, more or less aciculate and always approximate; second joint of the maxillary palpi much shorter than the third; anterior tarsi finely, densely pubescent beneath; prosternum very finely, feebly carinate throughout.. 2

Labrum broadly sinuato-emarginate at apex, the emargination having two short obtuse and more widely separated teeth; second palpal joint very much shorter than the third; anterior tarsi not at all dilated, having long coarse hairs beneath; prosternum finely, unevenly and feebly carinate.. 3

Labrum quadridentate at apex and generally broadly subtruncate and triemarginate.. 4

2 — Head rounded to subtruncate at base, the body rather slender; legs and tarsi slender; sculpture more or less coarse. Palaearctic and Nearctic regions..**Stilicus**

Head broadly sinuate at base, the body very stout; legs and tarsi thick; sculpture very fine and dense. Nearctic regions.........**Pachystilicus**

3 — Body very stout with the head orbicular; third maxillary palpal joint unusually small, subcylindric and bent; sculpture fine and dense, the vestiture very short and stiff; femora and tibiae rather thick, the hind tarsi slender and almost as long as the tibiae. Myrmecophilous. Nearctic regions..**Megastilicus**

4 — Outer pair of labral teeth as large and conspicuous as the inner; second palpal joint much shorter than the third; anterior tarsi slightly dilated and more densely pubescent beneath; legs slender; sculpture coarse as in *Stilicus*. Palaearctic regions.........................***Stilicosoma**

Outer pair of labral teeth very minute; anterior tarsi not dilated and usually not densely clothed beneath; sculpture of the integuments always very fine and dense.. 5

5 — Prosternum strongly carinate throughout its length................. 6

Prosternum not at all carinate except posteriorly near the coxae......... 7

6 — Inner pair of labral teeth short and broad, widely separated, each tooth deeply bifid and forming two acute denticles; labrum not at all produced in the middle but broadly subtruncate; head rounded at base, the eyes moderate or rather small; second palpal joint but little shorter than the third, moderately elongate; gular sutures as usual; prothorax oblong-parallel, the angles distinct. Nearctic regions......**Stilicolina**

Inner pair of labral teeth strong, the labrum elongated in the middle; maxillary palpi very long; mandibles broad; prosternum elongate, the prothorax without the lateral angles of *Stilicus*. Tropical America. ***Eustilicus**

7 — Labrum broadly truncate and deeply trisinuate, the median teeth long, simple and aciculate; mandibles broad and strong; maxillary palpi long, the second joint slightly shorter than the third; gular sutures meeting behind the middle; head subtruncate at base, the eyes very small; prothorax obtrapezoidal, the anteriar angles rounded; legs long, the femora somewhat stout. Sonoran region.............**Omostilicus**

The characters of the Mexican and Central American *Eustilicus* Shp., are taken from the "Biologia;" at first it seemed as though the genus named *Omostilicus* in the table might be identical, but the statements concerning the absence of thoracic angles and carination of the prosternum evidently render highly improbable any close affiliation of the two genera. The presence of two minute external labral denticles in *Eustilicus* is assumed, as no mention of them is made by Dr. Sharp. It is rather singular that the completely different labrum of *Stilicus rufipes* Germ., taken in connection with its very pronounced divergence in general habitus, should not have been more fully dwelt upon by European authors. The differences are of full generic significance and the name *Stilicosoma* (n. gen.) is suggested for it as above.

Stilicus Latr.

The American species of this genus are all much smaller than the European and have far simpler secondary male sexual characters, but appear to be truly congeneric. They occur throughout the United States from the Atlantic to the Pacific and are generally rather abundant individually. There are usually several species possessing secondary male sexual characters of the same type, though variously modified, and they might be classified in this manner, but, owing to the fact that a very few distinct forms are at present represented by the female alone, I prefer to attempt an arrangement based upon general characters, presumably common to the sexes, as follows: —

Under surface of the head densely punctured.......................... 2
Under surface of the head sparsely punctured.......................... 6

2 — Sculpture finer, the punctures dense even on the elytra. Form rather broad and subdepressed, rufo-piceous in color, the abdomen blackish, the elytra dusky with the external angles broadly pale, the legs and antennae rufo-testaceous; head well developed, subquadrate, truncate at base with broadly rounded angles, the sides parallel; eyes large, broadly convex, at about one-half more than their own length from the base; antennae rather slender, feebly incrassate, scarcely a third longer than the head; surface confluently punctate above, the punctures shallower and polygonally crowded beneath; prothorax rather broad, slightly longer than wide, nearly three-fourths as wide as the head, obtusely angulate at the sides at apical third, the angles well rounded,

the sides feebly converging and broadly rounded thence to the base and rapidly so and subsinuate thence to the narrow apex, the punctures similar to those of the head but less confluent; elytra quadrate, parallel, a third wider and one-fourth longer than the prothorax, equal in width to the head, closely and asperately punctate; abdomen parallel with very feebly arcuate sides, distinctly narrower than the elytra, minutely, closely punctate; hind tarsi rather shorter than usual. Male with a broadly rounded abrupt emargination occupying median third of the apex of the fifth ventral, from the bottom of which projects a narrow slender aciculate process extending beyond the limits of the sides of the emargination; sixth segment with a triangular notch having straight sides and acute apex, somewhat deeper than wide and about one-third as wide as the segment; segmental surfaces unimpressed. Length 3.9 mm.; width 0.78 mm. District of Columbia.
opaculus Lec.

Sculpture coarse, the elytra always more or less sparsely punctate....... 3

3 — Head broadly subtruncate at base, the eyes very large, the antennae short and thicker; pronotum with a smooth median line; elytra large, wider than the head; punctures of the head very dense but not coalescent; body less elongate..4

Head rounded or subangulate at base, more elongate, the eyes moderate in size, the antennae longer and more slender; pronotum without a smooth median line; elytra smaller, never wider than the head; punctures of the head longitudinally confluent.................................... 5

4 — Body stout, parallel, moderately convex, deep black in color throughout except the elytral apex, which is pale flavo-testaceous and similar in color to the femora and tarsi, the knees and tibiae piceous, the antennae dusky testaceous; lustre dull, the elytra and broad median line of the pronotum polished; head as wide as long, coarsely and very densely punctate above and beneath, the eyes very large, broadly convex and not very prominent, almost continuing the outline of the tempora behind them and situated at about two-thirds of their own length from the base; tempora evenly rounded from the eyes to the neck, the base broadly, very feebly arcuate or subtruncate; prothorax slightly elongate, two-thirds as wide as the head, punctured like the latter except along the impunctate median line, broadly angulate at apical third, the sides thence just visibly converging and straight to basal fourth, then more convergent and subsinuate to the broad base, strongly converging and broadly subsinuate anteriorly to the narrow neck; elytra large, parallel, scarcely as long as wide, three-fifths wider and one-third longer than the prothorax, convex, strongly impressed throughout at each side of the suture, the punctures fine, sparse and scarcely at all asperate; abdomen parallel, narrower than the elytra but subequal in width to the head, the sides feebly arcuate, minutely, closely punctate; legs slender. Male unknown. Length 4.3 mm.; width 0.95 mm. Oregon (Albany),—Mr. Wickham......................**oregonus** n. sp.

Body similar in form, coloration and sculpture to the preceding but smaller in size, with the eyes more convex and prominent, the tempora behind them less converging to the broadly rounded basal angles, the feebly converging straight sides of the prothorax behind the obtuse anterior angles shorter, extending only to basal third, the elytra relatively smaller and only just visibly wider than the head, about as long as wide, the abdomen wider, being, at the middle, very nearly as wide as the elytra. Male with the fifth ventral broadly and slightly flattened toward the middle, the apex truncate, with a very shallow simple and and broadly rounded sinus in fully median third; broad tip of the sixth segment with a simple semicircularly rounded sinus in about median fourth and about three times as wide as deep. Length 3.9 mm.; width 0.88 mm. New York (Long Island) to Virginia...**latiusculus** Csy.

5 — Prothorax evidently shorter than the elytra. Body blackish-piceous in color, except the prothorax which is dusky rufous, the elytral apices and legs throughout pale flavo-testaceous, the antennae dark rufo-testaceous; punctures of the head and pronotum coarse and longitudinally confluent, of the under surface of the former equally coarse and very close-set but not distinctly confluent, of the elytra finer but strong and rather sparse, of the abdomen very fine and notably sparse, the last two surfaces polished; head longer than wide, the convex eyes at nearly twice their own length from the base, the sides behind them rapidly converging and broadly arcuate to the narrow neck; labral teeth unusually long and acute; prothorax much longer than wide, two-thirds as wide as the head, broadly rounded and very obsoletely subangulate at two-fifths from the apex, the sides thence feebly converging and nearly straight to basal fifth, thence strongly converging to the base, strongly converging and straight anteriorly to the narrow neck; elytra quadrate, parallel, one-half wider than the prothorax and about a fifth longer, just visibly narrower than the head; abdomen parallel, very feebly arcuate at the sides, as wide as the elytra; legs slender. Male with the fifth ventral unmodified on the disk, the apex rectilinearly truncate, with a very small, broadly triangular median process, wider than long and obtusely angulate, the process slightly tumid on the surface, the sixth segment with a broad, shallow and broadly rounded apical sinus, nearly five times as wide as deep. Length 4.3 mm.; width 0.75 mm. New York, Pennsylvania and District of Columbia. **rudis** Lec.

Prothorax equal in length to the elytra. Body stouter but otherwise nearly similar, pale rufo-testaceous in color, the abdomen broadly clouded with piceous, the elytra more flavate, with the apex more broadly and conspicuously pale and nearly luteous-white, the legs very pale honey-yellow throughout; head nearly as in *rudis* but broader and less evenly rounded at base, the latter being broadly and obtusely subangulate; prothorax broader and more oval, the anterior angles, just behind apical third, much more broadly rounded and subobsolete; elytra larger, subquadrate, only very slightly narrower than the head, two-fifths wider and scarcely longer than the prothorax, strongly shining and somewhat more sparsely punctured than in *rudis;* tarsi rather more elongate. Male unknown. Length 4.3 mm.; width 0.8 mm. Rhode Island (Boston Neck)..**apicalis** n. sp.

6 — Head broadly rounded or subtruncate at base........................7

Head strongly rounded or subangulate at base, generally ogival in form behind the eyes 10

7 — Elytra large, much wider than the head.............................8

Elytra small, always distinctly narrower than the head...................9

8 — Stout in form, convex, shining, obscure rufo-piceous in color, the elytra subpiceous with pale apex, the abdomen blackish, the legs throughout pale lateo-flavate; head fully as wide as long, rather coarsely punctate, the punctures shallow, not coalescent but polygonally crowded, each with a crater-like centre bearing a small hair, strong but sparse on the under surface; eyes large, at scarcely their own length from the base, the sides behind them rounded in circular arc to the feebly rounded and broadly subtruncate base; labrum large, the teeth small; antennae rather thick; prothorax unusually large, but little longer than wide, nearly three-fourths as wide as the head, the obtuse angles at apical third distinctly rounded, the punctures rather coarse but not very dense, the surface shining, the broad polished impunctate median line not at all canaliculate; elytra quadrate, more than one-half wider than the prothorax and two-fifths longer, finely, subasperately and sparsely punctate; abdomen narrower than the elytra, minutely, subasperately and rather closely punctate; legs only moderately long and slender. Male with the fifth ventral broadly and feebly flattened toward the middle, the apex rectilinearly truncate and unmodified, the sixth segment with a large rounded sinus much wider than deep. Length 3.9 mm.; width 0.8 mm. Rhode Island, Virginia, Lake Superior and Texas (Austin). **angularis** Er.

Form and size the same as in *angularis;* color more nearly piceous; head above rather finely and densely punctate, not rugose; below rufo-piceous, polished, somewhat sparsely punctate; sides behind the eyes slightly convergent, the hind angles rounded; base truncate; prothorax densely punctate, with a narrow, smooth and slightly elevated median line; elytra more finely and sparsely punctate, the tips narrowly pale; abdomen very finely, moderately densely punctured. Male with the fifth ventral toothed at the middle of the hind margin, the sixth triangularly emarginate. Length 4.0 mm. California (Los Angeles and Kern Cos.). **occiduus** Fall

9 — Moderately slender, subparallel, piceous-black, the elytra scarcely at all paler at tip, the abdomen black, the legs throughout pale luteo-flavate, the antennae dusky testaceous; surface somewhat shining, the punctures of the head and prothorax moderately coarse and densely subconfluent, of the elytra finer, subasperate and rather close-set, of the abdomen very fine, subasperate and moderately dense; head large, fully as wide as long, the eyes very large, convex and prominent, at notably less than their own length from the base, the sides behind them rapidly converging and broadly arcuate to the feebly arcuate base; prothorax much elongated, only three-fifths as wide as the head, of the usual form, the polished median line rather narrow but scarcely at all concave; elytra relatively very small, notably shorter than the prothorax and not much more than a fourth wider, quadrate, the sides very feebly diverging from the base, the surface unusually depressed or flattened; abdomen at base fully as wide as the elytra, wider at the middle, the sides parallel and feebly arcuate as usual; legs long. Male with the apex of the fifth ventral rectilinearly truncate and un-

modified, the surface with two small tumescent processes very near the apex, separated by about twice their own width, the sixth segment with a large simple rounded sinus, nearly three times as wide as deep. Length 3.7 mm.; width 0.7 mm. Massachusetts........**biarmatus** Lec.

Nearly similar throughout to the preceding but a little larger, the prothorax relatively smaller and less elongate, two-thirds as wide as the head, with the polished median line still narrower and distinctly concave; elytra larger, quadrate, a third wider and obviously longer than the prothorax. Male with the apex of the fifth ventral retilinearly truncate and unmodified, the surface with two tumescent processes as in *biarmatus*, but having these processes very much smaller and separated by fully three times their own width, the sixth segment with a large and nearly similar sinus at tip. Length 3.9 mm.; width 0.75 mm. Lake Superior (Bayfield), — Mr. Wickham — and Iowa.................**lacustrinus** n. sp.

Somewhat similar to the two preceding in general form, piceous, the prothorax dusky rufous, the abdomen black; head more evenly and semicircularly rounded throughout from eye to eye, the confluent punctures somewhat coarser than in *biarmatus;* prothorax narrower and relatively more elongate, the angles very obtuse and rather more rounded, the punctures dense and confluent, the median impunctate line much wider and wholly unimpressed; elytra more convex and more finely and sparsely punctate, a little shorter than wide, with pale apex, rather shorter than the prothorax and two-fifths wider, less obviously narrower than the head than in *biarmatus;* abdomen at base slightly narrower than the elytra, at about the middle as wide as the latter, less densely punctulate and more polished. Male having the apex of the fifth ventral rectilinearly truncate, with a very small feeble arcuate lobe at the middle, the surface with two transverse and very feeble, densely and coarsely setulose tumidities very near and parallel to the hind margin, mutually separated by a very narrow space scarcely half as wide as either, the sixth segment with a very large simple parabolic sinus at tip. Length 3.7 mm.; width 0.7 mm. New York (near the city). **abbreviellus** n. sp.

10 — Median smooth line of the pronotum narrow, the polished elytra submetallic in lustre. Rather stout, convex, dark piceous in color, the abdomen black, the elytral apex narrowly pale, more broadly toward the sides, the legs pale luteo-flavate throughout, the antennae dark rufous; surface dull, somewhat coarsely, densely and confluently punctate anteriorly, the elytra and abdomen sparsely, finely punctate and polished; head relatively small, rather longer than wide, the eyes large, convex and prominent, at about their own length from the base measured longitudinally, the contour behind them ogival; antennae moderately long and slender, distinctly incrassate distally; prothorax slightly elongate, fully three-fifths as wide as the head, the sides obtusely but very distinctly angulate at two-fifths from the apex, thence very feebly converging and straight to basal fifth, then strongly converging and sinuate to the base; elytra large, quadrate, parallel, broadly convex, distinctly wider than the head, three-fourths wider and nearly a third longer than the prothorax; abdomen at base distinctly narrower than the elytra, the third and fourth segments generally subequal in

width to the latter; legs rather long and slender. Male with the fifth segment rectilinearly truncate at tip, with a gradually formed short and acute median lobe in the form of a cusp, occupying about median eighth or ninth of the width, the sixth segment with a simple rounded sinus occupying about half the apex and fully four times as wide as deep. Length 3.8 mm.; width 0.82 mm. New York, Virginia, Iowa, Missouri and Texas (Austin)........................**dentatus** Say

Median smooth line broader and more conspicuous; abdomen very sparsely punctulate and polished; elytra finely and sparsely punctate and strongly shining but never metallic in lustre; punctures of the head and pronotum rather coarse and strongly, longitudinally confluent..................11

11 — Elytra large, slightly wider than the head........................12

Elytra small, evidently narrower than the head........................13

12 — Form moderately stout, blackish-piceous in color, the elytral apex and legs throughout pale luteo-flavate, the antennae pale rufous; head somewhat longer than wide, rather broadly ogival behind the eyes, the latter convex and prominent, at their own length from the base measured longitudinally; antennae rather thick, distinctly incrassate distally; prothorax nearly as in *dentatus*, two-thirds as wide as the head; elytra scarcely as long as wide, slightly wider than the head, parallel, two-thirds wider than the prothorax and a third longer; abdomen at base obviously narrower than the elytra, the third and fourth segments as wide as the head; legs only moderately long and slender. Male with the apex of the fifth ventral broadly, feebly sinuate in median third, with a broad and obtusely angulate tooth gradually formed at the bottom of the sinus, the surface of the process slightly tumid and polished; sixth segment broadly, cylindrically impressed along the middle, with an apical sinus nearly a third as wide as the segment and about twice as wide as deep, subtriangular in form but with the angle distinctly rounded. Length 3.75 mm.; width 0.78 mm. Rhode Island (Boston Neck)..............................**luculentus** n. sp.

Form and size nearly similar to *luculentus* but deep black throughout, the elytra and abdomen highly polished, very finely, sparsely punctured, the former without paler apex except very faintly toward the external angles, the femora and tarsi pale honey-yellow, the former toward tip and the entire tibiae picescent, the antennae dusky; head nearly similar but more broadly and obtusely ogival at base, the eyes larger and at less than their own length from the base; antennae more slender and less incrassate; prothorax nearly similar; elytra quadrate, parallel, fully as long as wide, only just visibly wider than the head, three-fourths wider and two-fifths longer than the prothorax; abdomen nearly as in the preceding, the legs rather longer and more slender. Male unknown. Length 3.6 mm.; width 0.75 mm. Mississippi (Vicksburg).

nigrolucens n. sp.

13 — Form somewhat similar to the two preceding, smaller in size, black in color throughout, the elytra and abdomen highly polished and sparsely punctulate, the former pale only at the external apical angles, the legs as in *nigrolucens*, the antennae moderately slender, distinctly incrassate and somewhat paler rufous; head rather acutely ogival behind the eyes, which are very large, convex and prominent and at scarcely their own

length from the base; prothorax relatively larger, but otherwise similar in form; elytra subquadrate, rather shorter than wide, parallel, distinctly narrower than the head, not distinctly longer than the prothorax and only about two-fifths wider; abdomen near the middle fully as wide as the elytra. Male with sexual characters somewhat resembling those of *luculentus*, the broad sinuosity of the fifth ventral still more shallow, with the process at its middle point almost obsolete, being reduced to a very small, short and broadly rounded lobe; sixth segment more broadly impressed along the middle, with the apical sinus scarcely twice as wide as deep and very broadly parabolic in form, being much less narrowly rounded at the bottom. Length 3.5 mm.; width 0.7 mm. Rhode Island (Boston Neck)........**minusculus** n. sp.

The species named *minusculus* above seems to differ from any other in having the elytra obliquely and obscurely uni- or bi-costulate on the disk. The characters of *occiduus* are those given by Mr. Fall in the original description (Occas. Papers, Cal. Acad., viii). The species of the table constituting distinct types are *opaculus*, *latiusculus*, *rudis*, *biarmatus*, *dentatus* and *angularis;* the form named *abbreviellus*, although a well defined species, evidently belongs to the *biarmatus* section and the last three species of the table are distinct modifications of the *dentatus* type. The *rudis* type is distinguished by its much smaller eyes, these being of about the same size as in the European *Stilicus capitalis*. The Japanese species of the *rufescens* type, resemble *opaculus* and are distinguished from the others by an obviously less coarse and denser sculpture, subquadrate head truncate at base and by the presence of a few irregular longitudinal series of coarser punctures on the elytra, a character not observable elsewhere.

Pachystilicus n. gen.

The species of this genus are few in number but distributed over the entire nearctic province from the Atlantic to the Pacific. They are closely allied to *Stilicus* but differ in the very short and broad form, finer punctuation and much shorter and thickened legs; these characters, in addition to the large quadrate head, deeply sinuate at base, give them a distinctly different facies. The evidence at present accessible to me seems to indicate two species as follows:—

Color blackish-piceous, pruinose with very fine pubescence; head quadrate behind the eyes, the hind angles rounded, the base " emarginate," densely punctate and dull above, the under surface densely and rugosely punctured; prosternum very feebly carinate; prothorax small, hexagonal, the base one-half wider than the apex, the sides obtusely rounded, broadly subangulate before the middle, the punctures fine and close-set but with the surface rather shining, the punctures smaller than those of the head, the median impunctate line distinct, moderately wide and not elevated; elytra strongly transverse, not longer than the prothorax, as wide as the head, finely, moderately densely punctate, the punctures distinctly separated; abdomen finely, densely punctate. Male with the fifth ventral not modified, the sixth with a small rounded median sinus at apex, the surface not modified. Length 4.7 mm.; width 1.0 mm. California.................................**quadriceps** Lec.

Color dull rufo-testaceous, the legs and antennae concolorous, the head and abdomen above black, dusky beneath; body nearly similar to the preceding but with the prothorax slightly larger, not quite as long as wide, with the base very nearly twice as wide as the apex and the median impunctate line very narrow; elytra less transverse but much shorter than wide, somewhat longer than the prothorax and fully two-fifths wider, as wide as the head; abdomen short, at base fully as wide as the elytra, the sides parallel and arcuate, the third and fourth segments materially wider than the elytra or head. Male somewhat smaller and less stout than the female, the fifth ventral very feebly sinuate in about median third at apex, the adjoining surface feebly flattened, less punctured and glabrous; sixth segment not distinctly visible in specimens at hand but apparently with the sinus larger and shallower than in *quadriceps*. Length 3.5 mm.; width 1.1–1.2 mm. Manitoba (Winnipeg) ....**hanhami** Wickh.

The characters of *quadriceps*, given above, are derived from the original description and from some pencil notes taken by the writer from the original type some years ago. The forms from Missouri and Massachusetts, said by Dr. LeConte to be identical, are unknown to me at present. Of *hanhami* Wickham, I have three specimens.

Megastilicus Csy.

This remarkable myrmecophilous genus is founded upon a large species, of very stout form, with unusually small orbicular head, densely opaque integuments of the head and prothorax and with sparse vestiture consisting of short suberect stiff bristles, which characters give it a facies wholly without parallel in the subtribe. It may be described as follows:—

Form moderately convex, the hind body very broad, brownish-rufous throughout, the legs and antennae concolorus, the head and abdomen blackish; surface of the head above and beneath and of the pronotum impunctate but densely and very strongly micro-reticulate, the stiff short setae moderately close-set, of the elytra and abdomen rather more shining, the former less strongly reticulate, somewhat rugulose but not distinctly punctate, the setae very thick and moderately close-set, the latter rather densely clothed with very fine short and decumbent hairs of the usual type; head rather longer than wide, the base feebly lobed in the middle, the eyes small, not prominent, at fully three times their length from the base measured longitudinally; antennae short, moderately thick, about as long as the head, feebly incrassate, the joints rather closely united; prothorax slightly longer than wide, three-fourths as wide as the head, strongly rounded laterally at apical third, the sides thence moderately converging and nearly straight to the base and more strongly converging to the apex, the latter about half as wide as the base; surface with a narrow and less opaque median line; elytra one-fifth wider than long, nearly one-half wider than the head, three-fourths to four-fifths wider than the prothorax and fully a third longer, the sides feebly diverging from the base and broadly, feebly arcuate; abdomen short and broad, less than one-half longer than the elytra, at base fully as wide as the latter, and, at the middle, a little wider. Male with the fifth ventral unmodified, the sixth with a very large simple parabolic sinus, about half as wide as the segment and between two and three times as wide as deep. Length 5.0 mm.; width 1.45 mm. Massachusetts (Dracut),—Mr. Blanchard..**formicarius** Csy.

Although the body has a very stout form, nearly as in *Pachystilicus*, it probably has little or no phylogenetic relationship with that genus, as the head, labrum, palpi, sculpture and vestiture are of wholly different types. There is but little difference between the male and female, the former having the head and prothorax very slightly narrower when compared with the hind body.

Stilicolina n. gen.

In the peculiar opaque surface and very fine subgranuliform punctuation, this genus resembles *Omostilicus* and the remarkably fine and obsolete sculpture of *Eustilicus*, mentioned by Sharp, is probably similar. This type of sculpture is wholly dissimilar from that prevailing in *Stilicus*. In the very sharply elevated and entire prosternal carina and structure of the labrum, *Stilicolina* is wholly different from *Omostilicus*. We know at present but one species which may be described as follows from the male:—

Elongate, rather slender, parallel, only moderately convex, dark red-brown in color throughout the body and antennae, the legs slightly paler; lustre dull, the elytra feebly shining; head rather longer than wide, the posterior half almost evenly semicircular in form, the eyes rather small, only slightly prominent and at about three times their length from the base measured longitudinally; antennae scarcely one-half longer than the head, somewhat thick, distinctly incrassate distally; punctures feebly granuliform and close-set above, obsolete and very sparse on the flat under surface; prothorax very densely punctured like the head but rather more finely and strongly, the median impunctate line very fine and scarcely entire, scarcely visibly longer than wide, three-fourths as wide as the head, oblong in form, the sides obtusely angulate and rounded at apical fourth, thence just visibly converging and straight to the broadly rounded basal angles and rapidly converging and feebly sinuate anteriorly to the narrow neck, which is less than half as wide as the broad truncate basal margin; elytra quadrate, parallel, fully as long as wide, rather wider than the head and about a third wider and longer than the prothorax, the punctures strongly and granularly asperate but less dense than those of the prothorax; abdomen parallel with the sides feebly arcuate, distinctly narrower than the elytra, very minutely, densely, subasperately punctulate. Male with the fifth ventral almost completely unmodified, the sixth with a very large and deep emargination, two-fifths as wide as the segment and somewhat wider than deep, the notch transversely and feebly rounded at the bottom, with its sides becoming almost parallel posteriorly. Length 5.7 mm.; width 0.95 mm. District of Columbia.......................................**tristis** Melsh.

This species does not seem to be at all abundant and most of the known examples were taken by Mr. Ulke.

Omostilicus n. gen.

This genus is also represented at present by a single species, the largest of the subtribe known to me. It departs strikingly from *Stilicolina* in its much larger head, very small eyes, form of the gular sutures, for the greater part non-carinate prosternum and structure of the labrum, but resembles it very much in sculpture, coloration and sexual characters. In both these genera the anterior tarsi are virtually undilated, even in the male, and are clothed beneath more or less sparsely with short stiff brown hairs, contrasting greatly with the dense white spongy-pubescent sole in *Stilicus*. The generic type may be described as follows: —

Moderately stout and convex, subparallel, evenly dark red-brown in color throughout, the integuments densely dull in lustre, the abdomen alone slightly shining; punctures of the head very finely, densely and obsoletely granuliform above, obsolete and sparse on the under surface which is simply densely micro-reticulate, of the pronotum finer, still denser and stronger, of the elytra coarser, dense and rugose, of the abdomen minute, asperulate and very close-set; head large, subpyriform, the sides parallel and broadly, evenly arcuate, merging gradually into the very broadly rounded basal angles, the base truncate in median half of the entire width; eyes very small, not at all convex or prominent, at fully four times their own length from the base; under surface notably convex, the sutures impressed; antennae rather long, moderately slender, not distinctly incrassate, twice as long as the prothorax, the basal joint much longer than the next two together; prothorax but slightly longer than wide, three-fifths as wide as the head, the sides obtusely angulate and rounded just behind apical fourth, thence rather strongly convergent and nearly straight to the broadly rounded basal angles and rapidly converging and nearly straight anteriorly to the neck, the apex about half as wide as the base, the disk without trace of smooth median line; elytra subquadrate, rather longer than wide, parallel and broadly arcuate at the sides, four-fifths as wide as the head, only one-fifth wider and about a fourth longer than the prothorax; abdomen parallel, broadly arcuate at the sides, slightly narrower than the elytra at base but as much wider than the latter at the middle of its length. Male with the fifth ventral virtually unmodified, the sixth with a large, circularly rounded sinus, occupying almost the entire apex and more than twice as wide as deep. Length 8.0 mm.; width 1.4 mm. Arizona.
sonorinus n. sp.

The description is drawn from the male throughout, this being the only sex known to me at present.

STILICOPSES.

This subtribe is, in some measure, intermediate between the Stilici and Sunii, having the free space between the corneous floor of the anterior acetabula and the side-pieces of the pronotum narrower than in the former, while in the Sunii these parts are connate. On the whole, the species bear a closer general resemblance to the Sunii than to the Stilici, however, and the reality of this affinity is further affirmed by the structure of the antennae and palpi, by the united gular sutures, tarsal structure and general type of sculpture. The group is peculiar to the American continents and comprises the two following genera: —

Body small in size, shorter and rather stouter in form, the head having coarse shallow polygonally crowded punctures, forming a reticulation, the pronotum granularly punctate, the elytra and abdomen rugosely punctured, the former more coarsely; head broadly arcuato-truncate at base, the eyes moderate, prominent; labrum large, with short parallel sides at base, the apex broadly angulate, with the angle truncate; antennae rather short, slender, feebly incrassate distally; ligula apparently unmodified at apex; labial palpi very slender, the third joint very short, aciculate; maxillary palpi long and well developed, the second joint long, slender, with very short sparse stiff hairs, the third elongate-oval, shorter than the second and more gradually narrowed toward base, the apical cavity very small, the surface densely clothed with short fine decumbent hairs, the fourth joint very small, obtuse and apparently minutely pubescent; gular sutures forming a single cleft-like line; neck between a fourth and fifth as wide as the head; prothorax circular, the apex not prolonged at the middle; prosternum well developed before the coxae, minutely and feebly carinulate throughout along the median line, having a small transverse gutter just behind the apical margin; elytra shorter than wide, with broadly rounded basal angles, the hind wings probably obsolete; abdomen short and broad with arcuate sides, the segments not impressed; legs somewhat slender, the tarsi short and rather thick, the anterior not at all dilated, the posterior with the first joint slightly less than half the entire length and more than twice as long as the second, the third extremely short, much wider than long, the fourth strongly lobed, including the lobe about as long as wide, the lobe truncate, the fifth short and very slender, extending only slightly beyond the apex of the lobe of the fourth joint; claws small, slender and feeble. Eastern North and Central America............ **Stilicopsis**

Body larger, more elongate and more convex, the upper surface throughout simply and only moderately coarsely punctate; antennae very slender and much elongated, only the last three joints gradually and feebly incrassate, the joints very slender, each swollen anteriorly toward apex; labrum very large with the basal part rounded at the sides, the middle three-fourths of the apex having the sides converging to the transversely truncate median part, which is nearly one-half the total width; eyes well developed, prominent; base more rounded; palpi and gular sutures nearly as in *Stilicopsis;* neck barely a fifth as wide as the head; prothorax elongate, rounded at the sides and gradually narrowed toward base, the apex narrowly prolonged in the middle to the neck, this lobe truncate at tip and narrower than the base; prosternum longer before the coxae, broadly constricted behind the apex, finely carinate along the middle throughout; legs slender, the tarsi nearly as in *Stilicopsis* but rather more slender and elongate, the basal joint relatively still longer, constituting half the entire length. North and Central American Atlantic coast................................ **Stamnoderus**

These genera differ greatly in the general facies of the body, in the antennae, sculpture and form of the prothorax but are closely related otherwise.

Stilicopsis Sachse.

The peculiar form of the prothorax, almost exactly circular in outline, short elytra with diverging sides and broad convex abdomen, will identify this remarkable genus at first glance. Our single species may be briefly described as follows: —

Form parallel, moderately convex, pale luteous in color throughout, slightly shining, subglabrous; head scarcely as long as wide, the eyes convex, prominent, coarsely faceted and at somewhat more than their own length from the base measured longitudinally, the sides circularly rounded behind them to the neck; antennae distinctly shorter than the head and prothorax, the latter feebly convex, densely granulose throughout, the surface impressed at the sides behind the middle, equal in width to the head; elytra transverse, not quite as long as the prothorax, at apex distinctly wider, coarsely, closely, rugosely punctate; abdomen at the middle wider than the elytra, finely, closely and rugosely punctate, shining. Male with the fifth ventral broadly, parabolically emarginate throughout its width, the sixth similarly emarginate but more strongly; cleft of the seventh broad, the ligula parallel, arcuato-truncate at tip; segmental surfaces not modified. Length 2.6 mm.; width 0.58 mm. North Carolina (Asheville) and Florida.
paradoxa Sachse

The median line of the pronotum is very finely elevated or cariniform. Other species occur in Mexico and the neotropical regions.

Stamnoderus Shp.

The species of this genus are at least three in number in our Atlantic states and may be readily distinguished from *Stilicopsis paradoxa* by the larger size and the peculiar form of the prothorax. The antennae are of unique structure, the singular swelling of the anterior side of the long and extremely slender joints toward tip being doubtless of a special sensorial nature. Individuals are not at all rare and the species represented by material before me may be distinguished by the following characters — drawn from the female in each case: —

Body black or piceous-black in color, the elytra and last two ventral segments pale; legs and antennae very pale throughout; abdomen broader 2

Body pale luteous in color throughout, somewhat smaller in size......... 3

2 — Form stouter, convex, shining throughout, the head and prothorax with impressed close-set and rather feeble but distinct punctures, the elytra more coarsely, deeply, rather closely, subrugosely and conspicuously punctate, the abdomen finely, closely punctulate; head as long as wide, abruptly narrowed before the eyes, the front parallel and rectilinear at the sides; eyes prominent, at their own length from the base, the sides behind them rapidly convergent and arcuate to the neck; antennae rather more than half as long as the body; prothorax longer than wide, distinctly narrower than the head, convex, the surface impressed at the sides behind the middle, the median line narrowly smooth and slightly elevated; elytra as long as the prothorax and a fourth or fifth wider, scarcely as long as wide, the sides subparallel and broadly arcuate, the base moderately oblique at the sides, with the angles obtusely rounded; abdomen parallel, feebly arcuate laterally, only slightly wider than the elytra. Length 3.8 mm.; width 0.68 mm. Virginia...**monstrosus** Lec.

Form more slender, similar in color, lustre and sculpture to *monstrosus* but deeper black and less piceous; head longer than wide, less narrowed before the eyes, the latter less prominent but of the same size, the sides more strongly converging and arcuate behind them to the neck; antennae half as long as the body; prothorax narrower and more elongate, only just visibly narrower than the head, otherwise nearly similar; elytra much narrower, smaller in size, fully as long as wide, barely as long as the prothorax and only about a sixth wider, the sides feebly diverging, feebly arcuate, the base very oblique at each side with more obtuse shoulder angles; abdomen relatively broader, parallel, arcuate at the sides, much wider than the elytra. Male with sexual characters nearly as in *Stilicopsis*, the fifth ventral feebly, subtriangularly emarginate throughout the width, the sixth also more strongly and parabolically emarginate throughout the width, the seventh with a broad slit, narrowing toward base, the ligula broad, flat and truncate; female with the sixth ventral very broad, obtusely rounded in circular arc at tip. Length 3.9 mm.; with 0.65 mm. North Carolina (Asheville).
carolinae n. sp.

3 — Body more parallel, shining, uniform and very pale in coloration throughout; head nearly as in *monstrosus* but more finely punctulate and similarly impressed at each side of the front before the eyes, the latter rather smaller but equally prominent, at more than their own length from the base; antennae more than half as long as the body; prothorax as in *carolinae;* elytra parallel, arcuate at the sides, barely as long as wide, nearly as in *monstrosus*, as long as the prothorax and much wider; abdomen much narrower, parallel and almost straight at the sides and not wider than the elytra. Length 3.5 mm.; width 0.6 mm. Florida.
pallidus n. sp.

The conformation of the elytra is such as to suggest that the hind wings may not be fully developed in this genus, though they are probably less vestigial than in *Stilicopsis*. Like the latter genus *Stamnoderus* occurs also in Central America. *Monstrosus* was originally assigned to *Sunius*.

SUNII.

This group or subtribe consists for the most part of the single genus *Sunius*, one of the most widely distributed and characteristic Paederid genera of the palaearctic and nearctic regions of the world. There are a few other genera, especially some peculiar to the neotropical regions, but none other appears to enter the fauna of America. In some features, such as the structure of the tarsi, antennae and the general habitus of certain forms, it apparently makes a closer approach to the Pinophilini than any other type of the Paederini, but it can be stated quite positively that any such resemblances are merely superficial and fortuitous, for in the structure of the prosternum, palpi, form of the head above and beneath and many other characters these two types of Staphylinidae are so widely separated as to indicate little or no phylogenetic relationship. The three genera which happen to be represented by material in my cabinet may be described as follows: —

Labrum quadridentate, advanced and arcuate toward the middle, the teeth broad and very strong, the median very much longer and more advanced than the outer and each bearing a short stiff tactile seta laterally near its acute apex, the outer teeth acute and nude; prosternum transversely and broadly tumid, finely, longitudinally and rather feebly carinate, the carina not crossing the transverse concavity just behind the apical margin; hind tarsi almost as long as the tibiae, slender, the basal joint about half as long as the remainder taken together; head as in *Sunius;* eyes smooth, the facets not convex; sculpture throughout very coarsely but not densely, simply punctate. Europe......***Nazeris**

Labrum bidentate; eyes not smooth, each of the individual facets convex.. 2

2 — Labrum very short, broadly truncate, having a small median emargination, at each side of which there is a short tooth in the form of a slender truncated cone, a very small stiff tactile seta projecting axially from its extremity, the edge just without each tooth broadly and arcuately lobed; prosternum thrown up in an acute transverse ridge at some distance from the apical margin and separated therefrom by a narrow deep concavity, the median line with a fine but acutely elevated, somewhat uneven carina, which crosses the anterior concavity and attains the apical

margin; hind tarsi rather elongate but distinctly shorter than the tibiae, the basal joint much elongated but shorter than the remainder; head more or less broadly arcuato-truncate at base; sculpture only moderately coarse, the head and pronotum strongly punctato-reticulate, the elytra and abdomen asperately punctate; body more or less slender. Europe, Asia and North America............**Sunius**

Labrum advanced and prominent toward the middle, the teeth moderate in size, broadly triangular, each with a longer and very slender seta projecting from its apex, the teeth separated by a moderate emargination, the transverse bottom of which bears two very minute approximate denticles, each of which has a long slender tactile seta projecting from its apex; just without each of the principal teeth there is a small, angulate emargination of the edge; prosternum long, nearly flat, not transversely tumid but with a very small cariniform elevation paralleling and close to the apical margin, the median line from this carina to the coxae strongly carinate; posterior tarsi short, very much shorter than the tibiae, the basal joint much elongated and as long as the entire remainder; anterior tarsi of the male thicker though scarcely dilated, the subapical joints somewhat obliquely united, — suggesting *Pinophilus;* head prolonged and strongly rounded at base; sculpture of the head and pronotum consisting of large reticulations of somewhat feeble lines, of the elytra of distinct, rather coarse and sparse impressed punctures, the abdomen obsoletely and very finely, sparsely punctulate. Central America..***Dibelonetes**

The diagnosis of *Nazeris* Fauv., has been taken from a female of *pallidipes* Reit., and that of *Dibelonetes* Sahl., from the male of a form which appears to constitute a variety of the Central American *fragilis* Shp., from San Marcos, Nicaragua.

I greatly regret not being able to study the genus *Ctenomastax* Kr., in order to determine its relationships, but this remark also applies to several other described genera.

Sunius Erichs.

Numerous species of this genus, frequently closely allied among themselves, occur throughout the continent and are everywhere plentiful in individuals. They have in common a very monotonous uniformity of habitus which, in connection with their small size, has caused them to be greatly neglected by systematists. The ornamental coloration of many forms is highly inconstant, especially so in the Texan *inconstans*, and, in *americanus* and some others, the abdomen, which is generally of a dark testaceous with the last two segments black, may become wholly black, while in others, such as *discopunctatus*, the black color of the last two segments never shows any tendency to spead anteriorly. Although some are very variable, others, such as the *longiusculus* group, including the pale Sonoran species, appear to be quite constant in the limited ornamentation that they possess. The secondary sexual characters are very simple, consisting only of a small deep and acute cusp-like emargination of the sixth ventral and are but slightly diversified, rendering a satisfactory classification of the species very difficult; that suggested below is merely provisional and a much better one may be devised in the future. The twenty-one species in my cabinet may be known by the following characters:—

Species of the Atlantic coast to eastern Texas and including the entire Mississippi Valley.. 2
Species of the Sonoran province...15
Species of the true Pacific coast fauna, extending inland to the northward as far as the Rocky Mountains...17
2 — Head invariably black or piceous-black............................ 3
Head always pale in coloration..14
3 — Elytra pale, maculate with black, occasionally entirely black......... 4
Elytra completely pale in color, never maculate..............................13
4 — Large species, not less than 4.4 mm. in length, the general color dark throughout.. 5
Small species, not exceeding 3.7 mm. in length when the abdomen is not excessively extended.. 8
5 — Elytra distinctly longer than the prothorax........................... 6
Elytra equal to or shorter than the prothorax................................. 7
6 — Parallel, feebly shining, black throughout, and legs and antennae pale, the elytra pale in apical fourth, the pale area increasing in length inwardly, occupying almost apical half on the suture and extending feebly along the latter to the base; sculpture of the head and pronotum rather coarse, dense and somewhat longitudinally confluent as usual; punctures of the elytra strong and rugose but distinctly separated, of the abdomen finer but strong, asperulate and arranged in the usual transversely wavy series; head large, slightly wider than the elytra, longer than wide, the eyes convex and prominent and at slightly more than their own length from the base; basal part behind them obtrapezoidal, with the angles broadly rounded; prothorax oval, much longer than wide, widest and broadly rounded at the sides at apical third; elytra distinctly longer than wide, narrowed gradually toward tip, obviously wider and longer than the prothorax; abdomen at base as wide as the elytral apex, slightly wider posteriorly. Male distinctly more slender than the female, with the head and prothorax larger when compared

with the elytra, the fifth ventral unmodified, the sixth with the acutely angulate incisure large, its opening about a third as wide as the segmental apex, its sides beaded and broadly arcuate posteriorly, its depth rather greater than the width. Length 4.6–5.0 mm.; width 0.65–0.7 mm. Virginia and Pennsylvania........................**prolixus** Er.

Parallel in form, resembling the preceding but a little stouter, the pale color of the elytral apex extending less acutely anteriorly upon the suture, the eyes more convex and prominent, situated at obviously more than their own length from the base, the elytra broader and less elongate, distinctly wider but only slightly longer than the prothorax, as wide as the head; abdomen at base slightly narrower than the elytral apex, gradually wider posteriorly, the punctures finer and denser than in *prolixus.* Male with the acutely angulate incisure of the sixth ventral very small, deeper than wide, its opening occupying scarcely a fourth of the segmental apex, its sides broadly rounding posteriorly into the segmental apex. Length 5.0 mm.; width 0.65 mm. Texas (Austin)..**strigilis** n. sp.

7 — Form moderately slender, parallel, feebly shining, dark fusco-testaceous in color, the head, a large elongate-oval cloud on each elytron and the last two abdominal segments black, the latter color occasionally involving the entire venter; legs and antennae very pale as usual; head large, much wider than the elytra, the eyes rather small especially in the female, situated at very much more than their own length from the base, the basal parts of the head as in *prolixus;* prothorax large, oval, elongate, distinctly narrower than the head; elytra notably small, elongate, gradually narrowed toward tip, equal in width and length to the prothorax; abdomen at base as wide as the elytral apex, becoming gradually distinctly wider posteriorly, the sides straight as usual; punctures of the elytra and abdomen rather coarser than in *prolixus.* Male slightly more slender than the female but proportioned nearly the same, the acute incisure of the sixth ventral smaller than in *prolixus*, with its sides less broadly rounding posteriorly and its opening width decidedly greater than the depth. Length 4.6–5.0 mm.; width 0.7 mm. New York to Virginia (Fort Monroe).[=*prolixus* (Var.) Er.]. **americanus** n. sp.

Form narrower and more slender, parallel, dull in lustre throughout, black, the apical third of the elytra — becoming apical half on the suture — pale, the legs pale; head relatively rather small, scarcely as wide as the elytra, of the usual form, the eyes moderately convex and prominent and at more than their own length from the base, the sides behind them but feebly convergent, the angles less rounded than usual; prothorax scarcely visibly narrower than the head, but little longer than wide, otherwise of the usual form and sculpture; elytra scarcely longer than wide, very slightly wider than the prothorax and not quite as long; abdomen at base not quite as wide as the elytra and only slightly wider posteriorly. Length 4.4 mm.; width 0.58 mm. New York..**linearis** Er.

8 — Elytra subequal in length and width to the prothorax................ 9

Elytra much wider and longer than the prothorax........................10

9 — Body very slender, linear and parallel, densely sculptured throughout,

the punctures of the elytra relatively very coarse and rugose, those of the abdomen rather fine, black throughout, the prothorax sometimes obscurely rufescent, the elytra pale in apical fourth, the pale area not extending anteriorly along the suture except very slightly; head somewhat wider than the elytra; eyes convex, prominent, at about their own length from the base; prothorax but slightly elongate, very little narrower than the head, the sides rather strongly rounded behind apical fourth, thence unusually convergent and nearly straight to the broadly obtuse but distinct basal angles; elytra elongate, gradually narrowed toward tip, just visibly wider and only very slightly longer than the prothorax; abdomen gradually broader posteriorly. Male with the deep and acutely angulate incisure of the sixth ventral deeper than wide, moderate in size, with coarsely beaded sides and with the opening scarcely a third as wide as the segmental apex. Length 3.7 mm.; width 0.52 mm. Rhode Island (Boston Neck).........**spectrum** n. sp.

Body very slender and parallel, pale ochreo-testaceous in color, the head, a spot on each elytron somewhat variable in size but situated at the external margin behind the middle, and last two ventrals, black, in the last case extending anteriorly onto the fourth segment as a rule; head elongate, well developed, much wider than the elytra, the eyes moderately convex and at their own length from the base; prothorax much narrower than the head, slightly elongate, broadly rounded at the sides anteriorly and only moderately narrowed thence to the base; elytra elongate, but little narrowed posteriorly, just visibly wider and only slightly longer than the prothorax; abdomen slender, gradually broader behind. Male with the angulate notch of the sixth ventral moderate in size, more broadly triangular than usual, with the side margins widely beveled, the opening nearly one-half the segmental width and somewhat wider than the depth. Length 3.3–3.7 mm.; width 0.5 mm. Iowa..**binotatus** Say

10 — Prothorax unusually small, much narrower than the head. Body moderately slender, black or piceous-black throughout, the elytra pale in apical two-fifths at the sides and half at the suture, the legs and antennae pale flavo-testaceous; head large and well developed, a little longer than wide, abruptly narrowed before the rather small but strongly convex eyes, this part only about four-fifths as wide as the part behind the eyes, the base broadly arcuato-truncate; prothorax very small, elongate, three-fourths as wide as the head, the sides broadly rounded anteriorly and thence unusually convergent to the base; elytra large, but little longer than wide, not evidently narrowed posteriorly, wider than the head, two-fifths wider and a third longer than the prothorax; abdomen much narrower than the elytra but wider than the prothorax, parallel, not distinctly wider posteriorly, rather coarsely asperate. Male with the notch of the sixth ventral rather large, much deeper than wide, somewhat parabolic in outline, the angle very narrowly rounded, the edges strongly beaded, the posterior angles slightly obtuse but scarcely rounded, the opening nearly a third as wide as the segmental apex. Length 3.3–3.7 mm.; width 0.65 mm. New York to Iowa.............................**cinctus** Say

Prothorax well developed, only slightly smaller than the head...........11

11 — Head large, nearly as wide as the elytra and not very much longer than wide. Body rather stout, parallel, pale ochreo-testaceous in color, the head, a large internally rounded spot on each elytron extending from basal fourth to apical sixth and from the side margin to inner third, and the last two abdominal segments, black, the legs and antennae very pale as usual; head of the usual form, but little narrower before than behind the eyes, the latter moderate in size and prominence; prothorax three-fourths to four-fifths as wide as the head, longer than wide, of the usual form, the sides rather strongly rounded at apical fourth, thence moderately converging and straight to the broadly rounded basal angles; elytra large, only slightly elongate, feebly narrowed at tip, a third wider and longer than the prothorax; abdomen rather wide, gradually broader behind. Male unknown. Length 3.5 mm.; width 0.6 mm. Iowa................**simulans** n. sp.

Head smaller, much narrower and more elongate, distinctly narrower than the elytra..12

12 — Form slender, rather shining, pale ochreo-testaceous, with the head, a large internally rounded spot on each elytron from basal fourth to apical eighth and from the side margin to inner fifth, and the last three abdominal segments, black, varying to completely black, with the elytral suture feebly and narrowly rufescent, the legs and antennae always pale honey-yellow throughout; eyes strongly convex and prominent, at their own length from the base; prothorax short though longer than wide, the sides strongly rounded at apical fourth, thence strongly converging and straight to the basal angles, the side margins bristling with several long stiff black setae; elytra distinctly elongate, feebly narrowed at tip, two-fifths wider and longer than the prothorax; abdomen at base slender, distinctly narrower than the tip of the elytra, gradually slightly wider behind. Male with the fifth ventral feebly flattened along the middle, the acute cusp-like incisure of the sixth large, as deep as wide, with its sides broadly rounding outward posteriorly, the edge only anteriorly and finely beaded, the opening fully half as wide as the segmental apex. Length 3.3–3.7 mm.; width 0.5–0.55 mm. Texas (Galveston)..................................**inconstans** n. sp.

Form slender, nearly as in the preceding, pale testaceous in color, the head, a larger but less elongate, internally rounded spot on each elytron, extending from basal third or two-fifths to apical eighth and from the side margin to inner fifth or sixth, and the last two abdominal segments, black; head relatively still narrower and more elongate, the eyes somewhat larger but less prominent and at rather more than their own length from the base, the sides behind them rather less converging to the broadly arcuato-truncate base; prothorax much more elongate, the sides at apical fourth more broadly rounded and thence only feebly converging to the basal angles, the side margins with only about two stiff setae, one anterior and the other near the base; elytra nearly similar but still more elongate, a third or fourth wider and longer than the prothorax; abdomen very slender, still more notably narrower at base than the apex of the elytra, gradually perceptibly wider behind. Male with the fifth ventral narrowly and feebly impressed along the median line, the notch of the sixth very wide, the widely diverging

arcuate sides extending almost throughout the width of the segmental apex, with the edge not beaded but broadly beveled, the apical angle not as acute as in the preceding and the opening width twice the depth. Length 3.7 mm.; width 0.53 mm. Mississippi (Vicksburg).
ornatellus n. sp.

13 — Elytra small, subequal in length and width to the prothorax. Form very slender and linear, almost perfectly parallel, pale ochreo-testaceous in color, the head and the last two to three of the abdominal segments black; head of the usual form, distinctly longer than wide, well developed and distinctly wider than the elytra, the eyes moderate in size and prominence; prothorax relatively large, longer than wide, sensibly narrower than the head, the sides rather broadly rounded at apical third or fourth, thence strongly converging and nearly straight to the basal angles; elytra small, slightly elongate, only very slightly narrowed at apex, equal in width to the prothorax and only just visibly longer; abdomen rather broad, at base equal in width to the elytral apex, and, posteriorly, wider than any part of the elytra. Male with the fifth ventral narrowly and very feebly impressed along the middle, the notch of the sixth moderately large, its sides broadly flaring, arcuate and broadly beveled, its opening equaling half of the segmental width and its apical angle moderately acute. Length 3.0–3.7 mm.; width 0.5–0.52 mm. Iowa .... **brevipennis** Aust.

Elytra larger, much wider and longer than the prothorax. Form stouter, subparallel, pale ochreo-testaceous, the head and last two abdominal segments black or blackish; head smaller, not quite as wide as the elytra, the eyes much less convex and scarcely at all prominent, at barely their own length from the base, the converging sides short behind them, the angles broadly rounded; prothorax distinctly narrower than the head, only slightly elongate, the sides rather broadly rounded at apical fourth, thence but moderately converging and nearly straight to the broadly arcuate basal angles; elytra slightly elongate, sensibly narrowed near the apex, about a third wider and longer than the prothorax; abdomen unusually broad, slightly wider posteriorly but everywhere narrower than the elytra, rather finely, closely asperulate. Male unknown. Length 3.4 mm.; width 0.6 mm. Virginia (Norfolk).
fusciceps n. sp.

14 — Form very slender, subparallel, pale ochreo-testaceous throughout, except the last two abdominal segments, which are black; head rather small, elongate, distinctly narrower than the elytra, the eyes convex, prominent and at distinctly more than their own length from the base, the sides behind them rather strongly converging to the moderately rounded basal angles; prothorax but slightly elongate, obviously narrower than the head, the sides rather broadly rounded somewhat behind apical fourth, thence moderately converging and nearly straight to the broadly rounded basal angles; elytra much elongated, distinctly and gradually narrowed toward tip, a third or fourth wider and two-fifths longer than the prothorax; abdomen moderately slender, at base slightly narrower than the elytral apex and but little wider near the tip. Male sensibly more slender than the female throughout the body and head, the fifth ventral unmodified, the sixth with a very acute cusp-

like notch, having broadly arcuate, moderately flaring and broadly beveled sides, the opening rather wider than the depth and nearly half as wide as the segmental apex. Length 3.9 mm.; width 0.53 mm. Rhode Island to Iowa, Nebraska and Texas. [=*centralis* Aust.]. **discopunctatus** Say

15 — Body slender, parallel, black or piceous-black in color throughout, the legs and antennae pale; head elongate, nearly or quite as wide as the elytra, the eyes moderate in size and prominence, at fully their own length from the base, the sides behind them at first feebly converging, then broadly rounded into the more feeble arcuate base; prothorax oval, slightly longer than wide, visibly narrower than the head, the sides broadly rounded anteriorly, thence only just visibly convergent and very feebly arcuate to the broadly rounded basal angles, the sides with an erect seta anteriorly and posteriorly; elytra moderate in size, elongate, distinctly narrowed toward tip, a fourth or fifth wider and longer than the prothorax; abdomen moderately slender, but slightly wider posteriorly. Male unknown. Length (strongly extended) 4.7 mm.; width 0.6 mm. New Mexico (Albuquerque) ....**zuni** n. sp.

Body slender, pale ochreo-testaceous in color throughout, the last two ventrals never more than very slightly darker in color and never black or blackish; head as wide as the elytra or extremely nearly so, of the usual form; eyes unusually large but only very moderately convex, at a little less than their own length from the base, the latter broadly subtruncate with the angles broadly rounded; prothorax rather small, very much narrower than the head, evenly ovoidal, broadly rounded anteriorly, the sides thence rather strongly converging and nearly straight to the subcircularly rounded base, the side margins with a single seta anteriorly and posteriorly; elytra two-fifths to one-half wider and longer than the prothorax; longer than wide, narrowed only very near the apex; abdomen slender, at base much narrower than the elytral apex, gradually perceptibly wider behind. Male with the fifth ventral unmodified, the sixth with a very acutely angulate notch, having nearly straight sides which flare into the apex through less than usually arcuate angles, the opening not more than a fourth as wide as the segmental apex and a little narrower than the depth. Length 4.2 mm.; width 0.55 mm. Arizona (Holbrook and Peach Springs) and New Mexico, — Mr. Wickham ....**arizonianus** n. sp.

Body pale ochreo-testaceous throughout, the abdomen with the last two segments black or blackish; prothorax broadly rounded at the sides anteriorly, the side margin generally with two strong tactile setae anteriorly and one near the base.................................. 16

16 — Form very slender; head elongate, slightly narrower than the elytra, the eyes only moderate in size but strongly convex and prominent, at obviously more than their own length from the base, the basal part of the head behind them semicircularly rounded, with but slight traces of median truncature; prothorax much narrower than the head, elongate-oval, the sides moderately converging from the broadly rounded anterior part to the subcircular base; elytra slightly elongate, gradually and distinctly narrowed toward tip, two-fifths wider but scarcely a third longer than the prothorax; abdomen very slender, at base distinctly

narrower than the elytral apex and but just perceptibly dilated posteriorly. Male with the fifth ventral unmodified as usual, the very acute notch of the sixth cuspidiform, with its sides gradually more flaring posteriorly and broadly arcuate, the opening about half as wide as the segmental apex but scarcely as wide as the depth. Length 3.9 mm.; width 0.58 mm. California (Yuma) and Arizona (Tuçson and Sta. Rita Mts.) .... **tenuiventris** n. sp.

Form nearly similar throughout to the preceding but obviously stouter in every part, the eyes similarly moderate in size but very convex and prominent, the basal part of the head behind them more broadly arcuato-truncate at base and not semicircularly rounded; prothorax less elongate but nearly similar in form; elytra slightly elongate, somewhat wider than the head but less obviously so than in *tenuiventris*, two-fifths wider and longer than the prothorax; abdomen moderately slender, at base slightly narrower than the elytral apex, distinctly dilated behind and very much more obviously so than in the preceding species. Male not at hand, the comparisons made from females exclusively. Length 4.1 mm.; width 0.65 mm. Texas (El Paso) and Arizona (locality not recorded).. **similis** Aust.

17 — Elytra much longer than the prothorax; abdomen never as wide as the elytra, moderately punctato-asperate, the notch of the sixth ventral in the male rather large, cuspidiform; body invariably slender, generally pale in color; antennae filiform, only very slightly thicker toward tip as usual 18

Elytra subequal in length to the prothorax, the body stouter, the abdomen generally black, coarsely punctato-asperate and much wider than the elytra; notch of the sixth ventral in the male very small, triangular; antennae strongly incrassate toward the tip......................... 19

18 — Abdomen broader, much wider than the prothorax. Parallel, dark rufo-testaceous in color throughout, the last two abdominal segments nubilously blackish; head elongate, of the usual form, equal in width to the elytra, the eyes moderate in size, very convex and prominent, at more than their own length from the base, the basal part broadly obtrapezoidal, with broadly rounded angles and arcuato-truncate base; prothorax rather small, longer than wide, much narrower than the head, the sides obtusely angulate and only slightly rounded anteriorly, thence rather feebly converging and nearly straight to the broadly subcircular base; margins with a black seta anteriorly and posteriorly; elytra longer than wide, parallel, only slightly narrowed at the immediate apex, fully a third wider and longer than the prothorax; abdomen at base much narrower than the elytra, gradually enlarged toward tip. Male with the fifth ventral unmodified, the acutely angulate notch of the sixth having gradually more widely diverging simple arcuate sides, the opening nearly three-fifths as wide as the segment and wider than the depth. Length 3.25 mm.; width 0.5 mm. Montana (western), — Mr. Wickham.. **sectator** n. sp.

Abdomen narrower, not distinctly wider than the prothorax even posteriorly. Parallel, dark brownish-testaceous in color throughout, the head generally slightly darker than the prothorax and elytra and the abdomen black toward tip; head moderately developed, perceptibly elongate, slightly narrower than the elytra, the eyes at scarcely more than their own length from the base, convex and prominent; basal part behind them broadly obtrapezoidal, the angles well rounded as usual; prothorax small, much narrower than the head, slightly longer than wide, the sides rather narrowly rounded at apical third, thence distinctly converging and nearly straight to the rounded basal angles, the side margins with a tactile seta anteriorly and posteriorly; elytra large and much elongated, one-fourth longer than wide, with the sides broadly arcuate, gradually feebly converging toward tip, two-fifths to a half wider and three-fifths longer than the prothorax; abdomen at base not evidently wider than the prothorax, becoming somewhat dilated posteriorly. Male with the fifth ventral unmodified, the sixth with the very acute cusp-like notch as deep as wide, its sides gradually more widely flaring and broadly arcuate throughout, the opening a third as wide as the segmental apex. Length 3.65 mm.; width 0.6 mm. California (San Diego to Humboldt and Lake Tahoe), Nevada (Reno), Washington State (Spokane) and British Columbia (Victoria). [= *trisignatus* Boh.(?)]................................**longiusculus** Mann.

19 — Head equal in width to the elytra, each elytron maculate with piceous. Body stout, parallel, black — or paler from immaturity, — the elytra alone pale flavo-testaceous, each with a small, posteriorly and inwardly oblique piceous cloud at its centre, the legs and antennae very pale as usual; head large, only very slightly longer than wide, the eyes rather small but convex and prominent, at about one-half more than their own length from the base, the sides behind them only very slightly converging, then broadly rounding into the broadly arcuato-truncate base; prothorax rather small, very much narrower than the head, longer than wide, the sides broadly rounded anteriorly, thence moderately converging and very slightly arcuate to the subcircularly rounded base, the side margins with the usual tactile seta anteriorly and posteriorly but small; elytra subquadrate, scarcely as long as wide, not narrowed at tip, the sides feebly diverging from the base and nearly straight, two-fifths wider than the prothorax and very slightly longer; abdomen broad, at base distinctly narrower than the elytral apex especially in the male, at the apex of the fifth segment just visibly wider than any part of the elytra. Male with the fifth ventral unmodified, the sixth broadly arcuato-truncate at apex, with a small and acutely angulate, abruptly formed median notch, visibly deeper than wide, with its sides straight and the posterior angles slightly obtuse but only very narrowly rounded, the opening rather less than a fifth as wide as the segmental apex. Length 3.6 mm.; width 0.7 mm. Nevada (Reno) and California (Lake Tahoe to Sta. Clara)..........................**robustulus** n. sp.

Head much wider than the elytra in both sexes, the elytra immaculate. Body moderately stout in form, black, the prothorax generally more or less piceous, the elytra brownish-testaceous, the legs and antennae pale; head large, slightly elongate, very much wider than the elytra, the eyes moderately large and prominent, at but little more than their own length from the base, otherwise nearly as in *robustulus;* prothorax elongate-ovoidal, very much narrower than the head, the sides very broadly rounded anteriorly, moderately converging and broadly arcuate to the rounded base; elytra small, distinctly longer than wide, scarcely more than a fourth wider than the prothorax and very slightly longer, the sides subparallel, the basal angles unusually broadly rounded; abdomen broad, at base but little narrower than any part of the elytra, distinctly wider posteriorly. Male with the sixth ventral moderately broad, arcuato-truncate, the acutely triangular notch small, somewhat deeper than wide with its sides straight, its posterior angles obtuse and slightly rounded with the opening between a fourth and fifth as wide as the segmental apex. Length 3.3 mm.; width 0.6 mm. California (Sta. Cruz to Humboldt Co.)........................**californicus** Aust.

The coloration of the head in mature individuals appears to be sufficiently constant to be utilized as a dichotomous character, for in those species represented before me by large series, such as *discopunctatus*, *longiusculus*, *cinctus*, *prolixus*, *inconstans* and others, I have found it to be unvarying, no specimen of *discopunctatus*, for example, ever has the head in the least dusky. The only doubt that need arise may be due to immaturity of the black-headed species, but, as the head and abdominal apex seem to be the first somites to mature, there will probably be but few cases of uncertainty even from this cause. The genus is abundantly represented in New England and the Atlantic regions generally and the forms run together rather closely, forming a difficult study. *Trisignatus* Boh., is probably the same as *longiusculus* Mann., as the latter occasionally has a large feeble internally rounded nubulosity on each elytron, which may sometimes become more distinct.

In considering the species of the table in accordance with their natural affinities, it should be stated that *prolixus*, *americanus*, *linearis*, *strigilis*, *spectrum*, and *zuni* form one group, *cinctus* a very distinct group by itself, as shown by general form and by the nature of the secondary sexual characters, *binotatus*, *ornatellus*, *inconstans* and *simulans* another for the same reason, *discopunctatus*, *fusciceps*, *brevipennis*, *arizonianus*, *tenuiventris*, *similis*, *sectator* and *longiusculus* another, and, finally, *robustulus* and *californicus* form a remarkably isolated group, peculiar to the true Pacific coast fauna. *Discopunctatus* is very abundant everywhere east of the 100th meridian and represents in these regions the Pacific coast *longiusculus*, which has much larger elytra, a darker general coloration and differs in several other characters. Coloration seems to be most constant in the *longiusculus* group and most unstable in the *binotatus* group. The beetles of this genus run with very great rapidity when disturbed, being relatively more agile in proportion to their size than any other Paederids known to me.

ECHIASTERES.

The genus *Echiaster*, and some others more or less closely allied, form a group peculiar to the American continents and greatly developed in the tropical regions of South America. The Echiasteres are related to the Sunii by the closed anterior coxal cavities, the corneous floor of which abuts closely against the flanks of the pronotum, in certain features of general habitus and sculpture, in the general structure and vestiture of the maxillary palpi and in the united gular sutures, but differ greatly in the very slender filiform tarsi with the fourth joint not lobed, in the extremely short and posteriorly flexile antennae, the apex of the very short basal joint being emarginate posteriorly, in certain structural peculiarities of the mentum and in several other directions. The sculpture is not very coarse but extremely dense, so that the lustre is densely dull, and the vestiture is in the form of very short, thick, closely recurved pale hairs, entirely inconspicuous except under considerable magnifying power. The two genera known thus far to enter our territories may be defined as follows: —

Fifth and sixth ventral segments prolonged, narrow and subtubulate; eyes very large and conspicuous, completely nude; body rather small and moderately slender, the head well developed, orbicular, the labrum short, broadly rounded at tip, with a small angulate median emargination and four equal small and broadly angulate teeth; antennae but little longer than the head, the funicle slender at base, rapidly incrassate distally; mentum small, transverse, the sides elevated, forming ridges which are prolonged before the apex as slender aciculate processes, each bearing a short axial apical seta; labial palpi small, slender, the maxillary well developed with the second joint moderately stout, arcuate, short and nude, the third oval, feebly compressed, finely and densely pubescent, more arcuate anteriorly than posteriorly and longer than the second, the fourth small, short, obliquely conical and pubescent, very inconspicuous; neck very slender, about a sixth as wide as the head; prothorax small, elongate, suboval; prosternum well developed before the coxae, evenly convex, not carinate; elytra parallel, well developed; abdomen at base as wide as as the elytra, long, gradully tapering; legs very slender, rather short, the anterior tarsi not in the least dilated, the posterior very slender, filiform, two-thirds as long as the tibiae, the joints cylindric, closely united, the basal joint subequal in length to the next two together and rather longer than the fifth; claws small. Warmer parts of North and South America.................**Echiaster**

Fifth ventral not much elongated, wider than long, the sixth small; eyes very small, minutely setulose; sculpture and lustre nearly as in *Echiaster;* body very small in size, slender; head well developed, oblong, sinuato-truncate at base; labrum quadridenticulate, short, the median teeth longer than the outer; antennae extremely short, not as long as the head, nearly as in *Echiaster;* mentum small, transversely subquadrate, convex, the side margins bisetose, not distinctly elevated or produced, the anterior margin apparently finely denticulate at each side; labial palpi very small, slender, the maxillary moderately developed with the second joint arcuate, inflated distally, subglabrous, the third longer than the second, securiform with its anterior side strongly arcuate in the middle, the posterior nearly straight, the fourth joint extremely minute and abbreviated but slender and aciculate; neck relatively less slender, scarcely a fifth as wide as the head; prothorax small, with more pronounced angles than in *Echiaster*, the elytra nearly similar, the prosternum well developed before the coxae, carinate posteriorly; legs short and slender, the tarsi nearly as in *Echiaster.* Southern Atlantic and Gulf States..............................**Leptogenius**

The above diagnosis of *Echiaster* is drawn from our only species, the very small *ludovicianus*, to be described below, and it is probable that other genera and subgenera are represented among the numerous Brazilian species.

Echiaster Erichs.

The principal characteristic features of this genus are the narrow, prolonged and frequently subtubuliform fifth and sixth ventral segments and the extremely large eyes, which are even more conspicuous or relatively larger than in some species of *Stenus.* The only representative within our boundaries may be described as follows: —

Form slender, moderately convex, densely dull in lustre, pale red-brown in color throughout, the prothorax usually rather paler than the rest of the body; head as wide as long, the eyes convex, prominent, at less than half their own length from the base and half as long as the entire head and labrum; sides behind them converging and strongly arcuate for a short distance to the rather broadly arcuato-truncate base; prothorax less than three-fifths as wide as the head, distinctly elongate, the sides subangularly rounded at apical two-fifths, the base nearly twice as wide as the apex, the surface slightly elevated along the middle; elytra quadrate, parallel, as long as wide, equal in width to the head, slightly longer than the prothorax and very much wider, the surface rather depressed, somewhat coarsely, very densely, rugosely and granularly punctate, the suture not at all margined; abdomen at base as wide as the elytra, still more coarsely, closely and rugosely punctate, the last two segments becoming much more finely so and with the side margin greatly reduced, the segments not impressed at base. Male with the fifth ventral unmodified, the sixth with an abruptly formed, subparabolic emargination, deeper than wide, about a third as wide as the apex, with its bottom broadly rounded; ligula of the seventh white in color and submembranous, subcylindric, slender, with the apex slightly expanded and truncate; female having the sixth ventral obtusely and evenly rounded at tip. Length 2.8 mm.; width 0.5 mm. Mississippi (Vicksburg) and Louisiana (Bayou Sara).

ludovicianus n. sp.

The sexual characters are somewhat obscured in the only male at hand by a hardened exudation filling the emargination of the sixth ventral, so that I am not certain of the entire correctness of the description; the white submembranous ligula, however, is clearly defined and is radically different from anything else in the Paederini that I have observed.

Leptogenius Csy.

This genus is also represented by a single species thus far, readily distinguishable from the preceding by its still smaller size and more slender form, small eyes which are setulose and not nude, oblong, and not orbicular, basally sinuato-truncate head and normal terminal segments of the abdomen; it may be briefly described as follows: —

Body minute, slender, subparallel, only feebly convex, densely dull in lustre and closely, somewhat coarsely and rugosely punctulate, pale red-brown in color, the elytra generally darker except toward the sides and base; head well developed, longer than wide, parallel at the sides, the angles rounded, the eyes rather coarsely faceted and at between two and three times their own length from the base, slightly convex and prominent; antennae not quite as long as the head; prothorax small though fully three-fourths as wide as the head, about as long as wide, the sides subangulate and narrowly rounded at apical fourth, the base

rather more than twice as wide as the apex, the median line but very feebly prominent; elytra quadrate, parallel with the sides feebly arcuate, as long as wide, about a third wider and nearly a fourth longer than the prothorax, the elytra and abdomen sculptured as in *Echiaster.* Male with the sixth ventral broadly rounded at tip, truncate toward the middle, otherwise unmodified; female having the sixth ventral broadly rounded or subangulate at tip. Length 1.7 mm.; width 0.3 mm. Texas (Galveston) to North Carolina (Asheville).
brevicornis Csy.

The extreme simplicity of the male sexual characters, as described above, leads me to surmise that the specimens held to represent the male may really be a slightly modified female; more material will be necessary to decide this however. This species seems to have a very wide distribution, as no differences, even of a varietal nature, can be observed between the original Galveston types and the Asheville specimens before me. It is one of the smallest of known Paederids.

NOTES.

1 — Bibliography is omitted in the present paper for various reasons, but references to the original descriptions, in the case of the older authors, can be obtained from the Munich catalogue, and, to those published between the date of that work and 1883, from the catalogue of Duvivier, issued by the Entomological Society of Belgium. But few species have been described since the latter date and the bibliographic references of these can be obtained very readily from the Zoological Record. There is one exception, however, which relates to the species of Paederi and Sunii described by Austin, to which I can find no bibliographic reference whatever, either in the Zoological Record or in the catalogue of Duvivier, and I am wholly uninformed as to their place of publication. The representatives of those species in my cabinet have been identified from the original types, which are in the cabinet of LeConte at Cambridge, Mass.

2 — In the Henshaw list of 1885, one of Kirby's species is appended to the genus *Lathrobium* under the name *puncticolle*. I have not been able to consult the original description, but the name may imply some relationship with the genus *Lobrathium*, as a mere surmise.

ERRATA.

Page 69 — 6th line from top, *for* " nineteen " *read* twenty-six.
Page 146 — bottom line, *for* " **horridual** " *read* **horridula.**

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OBSERVATIONS ON THE STAPHYLINID GROUPS ALEOCHARINAE AND XANTHOLININI, CHIEFLY OF AMERICA.

THOS. L. CASEY.

Issued, November 22, 1906.

OBSERVATIONS ON THE STAPHYLINID GROUPS ALEOCHARINAE AND XANTHOLININI, CHIEFLY OF AMERICA.

EX LIBRIS
T. L. CASEY
1925

By Thos. L. Casey.

The following pages are devoted to the revision of several detached groups of Staphylinidae, which have been almost completely neglected heretofore in American literature. In the Aleocharinae, the parts of the series selected for present review are those which are of more general interest and therefore somewhat systematically collected, although this is only true in a relative sense, there being many most interesting genera and species still to be discovered. Besides these groups of the Aleocharinae, a revision of the tribe Xantholinini is presented, based upon such material as could be conveniently brought together. Here, as well as among the Aleocharinae, a number of foreign genera and species are included, more for instructive comparison than anything else, and a list of these will be appended with record of the page of publication, in order to facilitate bibliographic reference. Practically the only published work bearing upon the groups here revised is that of Dr. J. L. LeConte, consisting of some short notes and abbreviated descriptions, which could scarcely be termed synopses, even of the species then known to collectors, being restricted to a few more distinctive or representative forms; in fact, according to the more rational or at least discriminative modern concepts, a very large proportion of them represent distinct genera, and some, originally included within a single genus such as *Falagria*, even prove to be the types of genera not at all closely related. Several of the published species are not represented before me at this time, but these would scarcely alter in any way the general scheme of classification adopted for the several groups; they are, however, referred to with all the detail now accessible.

Throughout the present work and in future publications of the author, the title "America," will refer to the United States of America alone. The continent of which America forms a part, is named North America by common usage; the continent south of Panama is, in a similar way, universally known as South America. Having assumed the name United States of America at our birth as a nation, the single word standing for the country, and the only name from which an adjective can be properly derived, is America, in a manner conforming to that by which Mexico is derived from the full official title of the country — the United States of Mexico — or Colombia from the United States of Colombia. It is thought that by following this geographic terminology consistently no doubt or ambiguity need arise.

As on previous occasions, an asterisk will be prefixed to those subtribes, genera or other groups, which do not occur within the confines of America.

St. Louis, June 5, 1906.

Subfamily ALEOCHARINAE.

Omitting for the present certain aberrant forms of Staphylinidae, for the most part having small anterior coxae, the remainder of this great family may be assigned, apparently with some degree of propriety, to two subfamilies. One of these subfamilies may be formed from what are now known as the tribes Aleocharini and Tachyporini, the second comprising the succeeding tribes such as Staphylinini, Stenini, Paederini and others. It is easy to recall certain bonds of affinity uniting together the discordant elements of each of these vast complexes; for example, the dilatation of the anterior tarsi is unknown or extremely rare in the Aleocharinae and very frequent in the Staphylininae, and, again, the external sexual characters of the male generally evince themselves on the dorsal plates of the abdomen in the former and on the ventral surface alone in the latter. As a rule, also, the mode of antennal insertion differs in the two subfamilies.

Assuming, therefore, a subfamily Aleocharinae constituted as above, it may be subdivided into a number of tribes depending upon tarsal, antennal and other characters, to which simple group names have been hitherto attached. For example, the Aleocharini comprise those genera of the former heterogeneous tribe Aleocharini having the antennae 11-jointed and the tarsi 5-5-5-jointed, the Myrmedoniini those with similar antennae but having the tarsi 4-5-5 jointed, then the Bolitocharini with the tarsi 4-4-5 jointed and so on through the series. These tribes may then be further subdivided into subtribes based upon various less important structural peculiarities. The Aleocharini would include, for instance, a subtribe Aleocharae, including all those genera of the tribe Aleocharini having a small additional or fifth joint at the tip of the slender fourth joint of the maxillary palpi and the Oxypodae would be a subtribe characterized by a narrower and less heavy body, as a rule, and absence of the palpal appendage; there would also be other subtribal groups defined by special characters.

In the following pages I have selected for systematic study certain of these subtribal groups of genera as they occur in America.

Tribe ALEOCHARINI.

Subtribe **Aleocharae**.

This subtribe of the restricted tribe Aleocharini is well represented in America by numerous genera which may be defined as follows, the table including also all the known European genera: —

Hypomera strongly inflexed, not at all visible from a lateral point of view. 2
Hypomera feebly inflexed, in part at least visible from a lateral point of view in a horizontal plane passing through the axis of the body......11
2 — Mesosternum without trace of carina at any point; elytra not sinuate at tip externally.. 3
Mesosternum carinate, the carina generally extending to the tip of the process but sometimes abbreviated.. 5
3 — Abdomen with the first three tergites narrowly and acutely impressed

at base, the first two strongly, the third feebly, the fourth also apparently slightly impressed or with the basal plate equally strongly elevated. Mesosternum more or less wide between the coxae, attaining the metasternum, which is broadly rounded or subangulate and but slightly produced; head small, distinctly and arcuately narrowed to the base, the eyes large, the front between them angulate; antennae variable; basal angles of the prothorax obliterated; abdomen always coarsely and very sparsely punctate; hind tarsi with the basal joint much elongated. Cosmopolitan............................**Aleochara**

Abdomen with the basal tergite alone impressed at base; body stout but much smaller in size; antennae short, very stout, compact, slender at base; basal angles of the prothorax more evident though very broadly rounded.. 4

4 — Mesosternal process moderately broad, extending to the tip of the coxae, meeting the very short and broadly rounded metasternum and emarginate at tip; head small, strongly narrowed at base, the eyes large, the front obtusely triangular between them; prothorax much narrowed in front as in *Aleochara*, the abdomen strongly, more evenly and rather less sparsely sculptured; hind tarsi shorter than the tibiae, with the basal joint elongate as in *Aleochara;* male sexual characters evinced in irregular acute pectination of the sixth tergite and discal tuberculation of the fifth. Europe...........................***Ctenochara**

Mesosternal process slightly abbreviated and extremely narrow toward tip, the latter very narrowly truncate, attaining the acute tip of the somewhat elongate metasternal process; head large, abruptly and only moderately narrowed at base, the eyes relatively less developed, the front between them very broadly subtruncate; prothorax subparallel; abdomen much more finely, closely and evenly sculptured than in *Aleochara*; hind tarsi very elongate, slender, fully as long as the tibiae, with the basal joint much elongated as in *Aleochara*; male sexual characters undetermined. Pacific Coast of America...................**Aidochara**

5 — The carina entire and unusually elevated but formed, at least posteriorly, by a general bilateral compression of the surface, the summit generally more declivous toward the tip of the process, where it becomes setose; maxillary palpi normally slender and elongate, with the fourth joint aciculate; mesosternal process rather narrow toward tip, extending to the end of the coxae, where it meets the extremely short [and broadly arcuate metasternum; hind tarsi well developed, with the basal joint much elongated as in *Aleochara*....................................6

The carina generally entire though frequently abbreviated, always fine, even and formed by an abrupt elevation of the medial line only, never modified or setose toward tip...................................... 7

6 — Body more or less stout as in *Aleochara*, the head rather small, arcuately narrowing behind the well developed eyes, the front angulate between them; antennae rather well developed; prothorax much narrowed in front, nearly as in *Aleochara* but with the basal angles much more evident; elytra feebly but very obviously sinuate externally at tip; abdomen finely and very closely punctate, the first two tergites alone distinctly, though rather acutely, and only moderately, the remainder not definitely, impressed. Europe and America...........**Xenochara**

Body less stout, the head and prothorax nearly as in *Xenochara* but with the basal angles of the latter more rounded; elytra evenly arcuato-truncate at tip, not at all sinuate externally; abdomen more coarsely and only moderately closely sculptured, with the first tergite alone distinctly impressed. South Africa................................ ***Notiochara**

7 — Anterior and middle tibiae finely spinulose or setose, the former elongate and not dilated..8

Anterior and middle tibiae very coarsely spinulose externally, the former much shorter than usual, dilated and somewhat arcuate.............10

8 — Fourth joint of the maxillary palpi conical, the third elongate and moderately slender as usual. Body stout, parallel; mesosternal process slightly abbreviated, narrow, gradually tapering to the narrow emarginate apex, which attains the acutely angular apex of the pronounced metasternal projection; carina very fine, confined to the anterior half of the mesosternum; head rather large, but little narrowed behind the moderate and somewhat prominent eyes to the broad neck, the front between the eyes very broadly angular; antennae relatively short and very stout; prothorax with unusually distinct basal angles; elytra truncate or very feebly and broadly subsinuate externally at tip; abdomen finely, very closely punctured, the first three tergites broadly, deeply and subequally concave at base, the others not impressed; hind tarsi very long, fully equaling the tibiae in length, gradually tapering from base to apex, the basal joint longer than the next two combined; femora and tibiae densely fulvo-setulose. Western America............**Oreochara**

Fourth joint of the maxillary palpi aciculate.......................... 9

9 — Third palpal joint unusually short, broad at apex, obconical, not twice as long as wide, the fourth rapidly enlarged toward base; mesosternal process acutely pointed. Form narrower, more depressed and parallel; mesosternal process very narrow, gradually narrowed nearly to the apex, then more strongly and arcuately so to the actual tip, which nearly extends to the end of the coxae and fully attains the broadly but sharply angulate apex of the metasternum, the carina fine, confined to anterior two-fifths of the mesosternum; head large, the sides rapidly and arcuately converging behind the well developed eyes, the front between the latter very broadly parabolic; antennae well developed; prothorax with the basal angles broadly obtuse but distinct, the disk uniformly punctured; elytra with the apex narrowly and feebly sinuate at the sides; abdomen with the first four tergites broadly and roundly impressed at base, gradually less strongly so, the impressions deep on the basal plates, feeble but distinct on the fourth and all much more finely though more closely punctate than the remainder of the surface; hind tarsi rather shorter than the tibiae, with the first joint only as long as the next two combined and scarcely as long as the fifth, the tibiae more sparsely setulose than in *Oreochara*. Pacific Coast of America. **Calochara**

Third palpal joint elongate, moderately slender, the fourth slender and never more than feebly tapering throughout. Form generally similar to that of *Calochara*, less stout than in *Aleochara* and *Oreochara*, rather convex; mesosternal process variable in width but long, always truncate or sinuate at tip, generally nearly attaining the tip of the coxae and abutting against or slightly overlapping the broad apex of the metasternal projection; carina generally entire though frequently abbreviated, sometimes as much so as in the two preceding genera; head rather small in size, subparallel or only slightly narrowed behind the well developed eyes, the front between the latter angulate; antennae variable but more or less well developed; prothorax variable in sculpture, the basal angles more or less broadly rounded and indistinct; elytra each broadly arcuate at apex, not sinuate externally; abdomen densely to very sparsely punctured, the first three tergites alone impressed at base, gradually and rapidly less strongly as a rule; hind tarsi variable. Cosmopolitan........................**Baryodma**

10 — Body only moderately stout, parallel, strongly convex, the mesosternal process somewhat abbreviated, attaining the acute apex of the rather strongly produced metasternum, the carina strong and entire; head rather small, parallel behind the well developed eyes, the front angulate; maxillary palpi normal; antennae unusually small, the second joint much longer than the third; prothorax sparsely, irregularly and strongly punctured, with two deeply impressed median sulci, the base broadly lobed in the middle, the angles obsolete; elytra very coarsely sculptured, each strongly sinuate laterally at tip; abdomen parallel, finely, closely punctate throughout except along the more or less impunctate median line, the first four tergites strongly impressed at base, successively somewhat less strongly so, the depressions more coarsely punctured; hind tibiae sparsely setose, very slender at base, swollen thence to the tip, equal in length to the tarsi or but slightly longer, the first joint of the latter elongate. Pacific Coast of America..**Eucharina**

11 — Middle coxae widely separated. Body more or less stout, frequently very large in size, with partially opaque integuments; mesosternum wholly without trace of carina, the process extending only slightly beyond the middle of the acetabula, rounded or truncate at tip and abutting against or received within the truncate or sinuate and generally broader apex of the long broad metasternal projection; head moderate, strongly and arcuately narrowed behind the very moderate eyes, the front broadly parabolic; palpi elongate and normal; antennae well developed, generally stout; prothorax broadly arcuate at base, either continuously with the sides, the basal angles being obsolete, or discontinuously, the angles being distinct; elytra each arcuato-truncate at tip, not at all sinuate near ths sides; abdomen with the first two tergites deeply and broadly, the third less deeply and less widely impressed at base, the fourth and fifth broadly and feebly concave toward base, all the depressions impunctate though somewhat rugulose along the raised basal margins, the punctures fine, confined to posterior half of all the tergites except the sixth, which is wholly punctured; legs stout, the tibiae setulose, the hind tarsi much shorter than the tibiae, with the basal joint moderately elongate. Sonoran fauna of America and Mexico. [= *Tithanis* Csy.]................**Maseochara**

Middle coxae narrowly separated to subcontiguous, the mesosternal process generally extending to apical third or fourth of the acetabula, frequently very slender, truncate to very acute at tip; hypomera generally less visible from the sides than in *Maseochara*................................12

12 — Abdomen with the first four tergites impressed at base, successively less strongly, the surface more or less sparsely and finely punctate....13

Abdomen with the first three tergites impressed at base, the fourth and fifth not at all impressed, the impressions narrow, deep and subequal except in *Pinalochara*..15

Abdomen with the first two tergites alone impressed at base, the impressions rounded, deep and subequal..16

13 — Posterior tarsi shorter, the basal joint frequently but little longer than the second; body depressed. Form parallel, the integuments in great part opaque and with inconspicuous punctures nearly as in *Maseochara*; mesosternal process truncate to acute, separated from the angulate apex of the distinctly produced metasternum by a short depressed longitudinal discontinuity; head rather large, parallel behind the very moderate and somewhat prominent eyes, the palpi rather short and thick; front broadly subtruncate; antennae well developed; prothorax broadly arcuate at base, subparallel at the sides, the basal angles more or less distinct; elytra well developed, not sinuate at tip externally; abdomen parallel, with the basal impressions impunctate, the punctures elsewhere fine and sparse. Cosmopolitan. [= *Polystoma* ‖ Auct.]........**Amplenota**

Posterior tarsi longer, the basal joint greatly elongated, equal to the next three combined or nearly so; body normally convex..................14

14 — Body parallel, rather large in size, the integuments polished almost throughout, the punctures fine and not very conspicuous, very sparse on the abdomen; mesosternal process very narrow, gradually and very finely pointed, separated from the metasternum, which is very broadly rounded and does not enter the intercoxal space, by a very long deep longitudinal discontinuity; head well developed, parallel, somewhat swollen at the sides behind the moderate and slightly prominent eyes, the front obtusely angulate, the palpi normally long and slender; antennae well developed, the second and third joints much elongated; prothorax subparallel, the base arcuate, the angles obtuse and rounded; elytra well developed, each distinctly sinuate at tip externally; abdomen narrowed toward tip behind the middle, the impressions deep, rounded and unusually large, involving the greater part of each tergite, except the fourth, the fifth unimpressed, the impressions more coarsely punctate than the remainder; male sexual characters evincing themselves by a tubercle on the basal one or two and fifth tergites, the under surface of the second and third sometimes broadly excavated at base except near the sides; legs rather short, moderately stout, the tibiae somewhat closely setulose. Europe..................................* **Ceranota**

Body narrow, parallel, convex, the integuments finely punctate, slightly alutaceous, the abdomen polished; mesosternal process extremely narrow, gradually and acutely pointed, just attaining the acutely angulate apex of the pronounced metasternal projection without longitudinal discontinuity but on a higher level — viewed ventrally; head moderate, parallel and arcuate behind the rather small eyes, rapidly narrowed at the extreme base, the palpi slender; front angulate; antennae well developed; prothorax subparallel, unusually feebly arcuate at base, the angles obtuse but distinct; elytra only very obsoletely sinuate externally at tip; abdomen narrowed slightly toward tip, the first three tergites each with a large deep rounded basal impression occupying from about a half to a third the entire length of the tergite, the fourth with a very feeble concavity toward base, having a prominent basal margin but without the same character of depression as the first three, the impressions all rather more coarsely punctured than the remainder of the surface; legs rather long and slender. Atlantic districts of America.................**Echochara**

Body stouter but equally convex, the integuments finely punctate, somewhat alutaceous in lustre, the abdomen polished; mesosternal process narrow but with the apex subtruncate, extending posterially much further than usual in this group and attaining fully apical fifth of the acetabula and almost the end of the coxae, the tip extending to the moderately produced and parabolically rounded metasternal projection without longitudinal discontinuity; head rather small, parallel and somewhat arcuately inflated behind the moderate and slightly prominent eyes, abruptly narrowed at the extreme base; front broadly arcuato-truncate; palpi normally slender, the antennae well developed, with the second and third joints much elongated; prothorax subparallel, much more arcuate at base than in *Echochara*, with the basal angles obtuse and more rounded; elytra not sinuate at tip externally; abdomen slightly narrowed from base to the tip of the fifth segment, the impressions all unusually narrow and shallow, that of the fourth tergite very feeble, all more finely but more perforately punctate than the remainder; legs rather short and slender. Europe................ ......***Polystomota**

15 — Form somewhat narrow and depressed, parallel, the sculpture sparse; mesosternal process extending to apical fourth of the coxae, moderately narrow, the tip truncate and fully attaining the apex of the unusually elongate metasternal projection; head well developed, orbicular, the eyes well developed, the neck but little more than two-thirds as wide as the head, the antennae moderate, gradually incrassate, with the elongate second and third joints subequal; prothorax subparallel, with obtuse and slightly rounded though distinct basal angles, the hypomera almost as fully visible from the sides as in *Maseochara* and extending to the apex; elytra moderately developed, not in the least sinuate laterally at tip, the external angles rounded; abdomen with the first three tergites rather broadly, feebly and decreasingly impressed at base; hind tarsi short, nearly as in *Emplenota*, the first four joints subequal or with the first very slightly longer than the second. Sonoran regions...**Pinalochara**

Form rather stout, convex, alutaceous in lustre, the punctuation fine and very close throughout, including the abdomen; mesosternal process rather narrow but not strongly acuminate, flat, the apex arcuato-truncate, not attaining the very short and broadly rounded metasternal projection by a short deep longitudinal discontinuity; head rather small, feebly narrowed behind the somewhat prominent eyes, the front broad, feebly, evenly declivous to the apex; palpi somewhat short and thick; antennae moderately well developed, stout and somewhat compact, the second and third joints elongate, the fourth short, transverse and much shorter than the fifth as usual; prothorax unusually transverse and narrowed from base to apex, with the base broadly arcuate and the angles distinct; elytra large, each distinctly sinuate externally at tip; abdomen of normal width, narrowed slightly behind the middle, the impressions continuous in punctuation with the rest of the surface; legs short, the hind tarsi much shorter than the tibiae, with the basal joint as long as the next two together or but little longer. Europe and Atlantic America. ....**Rheochara**

Form less stout, convex, the integuments strongly shining, feebly and inconspicuously punctulate, the abdomen very sparsely punctulate, with the punctures of the impressions barely as large as the others and still sparser; mesosternal process very slender, much abbreviated as usual but very narrowly rounded or subacute at tip, the surface near the apex deeply concave, the tip failing to attain the very feebly rounded metasternum, which exhibits scarcely any tendency to project between the coxae, by an extremely large and deep longitudinal discontinuity, the mesosternum, with a low broad and flat irregular cariniform elevation in about anterior half; head relatively larger though moderate, abruptly constricted at base, the sides subparallel, the eyes moderately prominent, the front broadly arcuate, the antennae much larger and more developed, with the fourth joint abnormal, slightly elongate and not differing much from the fifth; palpi elongate and slender; prothorax only slightly narrowed from base to apex, broadly arcuate at base, the angles obtuse but distinct; elytra long and well developed, each deeply sinuate externally at apex; abdomen unusually narrow, rather strongly narrowed in apical half; legs slender, the hind tarsi shorter than the tibiae but very slender, filiform, with the basal joint as long as the next three combined and longer than the fifth. Pacific Coast of America..**Rheobioma**

16 — Body as in *Rheobioma*, shining, the integuments less sparsely and rather more distinctly sculptured; mesosternum without trace of carina anteriorly, the process very slender, excavated near the narrowly acuminate tip which just attains a long and very pronounced, narrowly rounded or subangulate projection of the metasternum; head and palpi nearly as in *Rheobioma*, the antennae almost as well developed but with the fourth joint much smaller than the fifth, though nearly as long as wide; prothorax subparallel, with the base strongly and evenly arcuate, the angles rounded but not obliterated; elytra long and well developed, each broadly and moderately sinuate externally at tip; abdomen normally broad at base but rapidly narrowed behind the second segment, the basal impressions scarcely visibly more coarsely but less closely punctured than the remainder of the first two tergites; legs rather long and slender, the hind tarsi as in the preceding genus. Pacific Coast of America......................................**Rheocharella**

The genera above described are rather numerous and it may seem more appropriate to consider some of them as subgenera. In regard to this, however, it should be stated that it seems very difficult to make any such combinations without including all of them as subgenera of *Aleochara*. After careful study it appears to me absurdly inconsistent to maintain *Mascochara* and *Emplenota* (*Polystoma*) distinct from *Aleochara*, as admitted in current literature, and not admit *Rheochara*, *Ceranota* and the others as likewise valid. In my own opinion they are all equally valid genera or else are all subgenera. The final conclusion will be revealed by future concurrence of opinion and the function of the writer is fulfilled in simply pointing out the numerous divergencies of structure. The attempt to determine the actual value of these anatomical discordances should, however, only be made by those willing to give the subject close and thorough study with adequate optical appliances. The talented systematists Thomson and Rey have been the only ones thus far to really examine these generic groups and I agree fully with their conclusions. Many of Rey's species, also, have been carelessly and unjustly suppressed, in addition to considerable unwarranted discrediting of his genera.

The foreign genera above indicated may be alluded to in brief as follows: —

CTENOCHARA n. gen. — This genus is founded upon a very small species of the European fauna, sent to me some years ago under the name *Aleochara clavicornis* Redt. It may or may not be correctly determined, but whatsoever its true name may prove to be, it can readily be recognized by the characters given the table. Whether other species should enter the genus at present is unknown to the writer.

NOTIOCHARA n. gen. — Two species from the vicinity of Cape Town in South Africa seemed at first to be aberrant members of *Xenochara*, but closer observation revealed certain peculiarities of structure which necessitate generic separation, these relating principally to the very important abdominal characters as stated in the above table, together with the entire absence of sinuation at the tips of the elytra near the sides. The types may be described as follows: —

Form moderately stout, convex, polished, deep black throughout, the elytra not at all paler; antennae black, the basal parts and legs dark piceous, the tarsi paler; pubescence very short, not dense, dark fuscous in color and inconspicuous; head not quite half as wide as the prothorax, strongly deflexed and deeply inserted, the eyes and palpi well developed, the latter slender and normal; antennae stout, somewhat longer than the head and prothorax, gradually and strongly incrassate distally, the outer joints less than twice as wide as long, the second and third moderately elongate, equal, the fourth obtrapezoidal, as long as the fifth but much narrower; prothorax three-fifths wider than long, strongly narrowed from base to apex, with the sides strongly and evenly arcuate, the base evenly arcuate; punctures like those of the head, very minute and rather sparse, evenly distributed; elytra short, but little wider than the prothorax, the sides much shorter than those of the latter, the suture barely three-fifths as long as the median line; punctures small but strong, close-set and very strongly asperate; abdomen at base almost as wide as the elytra, gradually but only very feebly narrowed thence to tip, finely but strongly, asperately and rather closely punctured, sparsely so toward tip; hind tarsi very nearly as long as the tibiae, with the basal joint longer than the next two combined and much longer than the fifth; mesosternal ridge feebly elevated, the finely cariniform summit even throughout, setose toward tip. Length 3.6 mm.; width 1.2 mm. South Africa (Wellington)......**subaspera** n. sp.

Form less stout, parallel, equally convex, deep black throughout; antennae black, faintly piceous at base, the legs paler, rufo-piceous; pubescence very short, dark and inconspicuous; head and antennae nearly as in *subaspera*, the latter somewhat shorter and more incrassate, not as long as the head and prothorax, the penultimate joint very nearly twice as wide as long; prothorax minutely, sparsely and evenly punctulate, transverse, nearly as in the preceding but rather less narrowed from base to apex, with more arcuate sides; elytra not at all wider though shorter than the prothorax, the suture nearly two-thirds as long as the median line, the punctures fine, less close-set but almost as strongly asperate; abdomen as wide as the elytra, arcuately narrowing in apical half, finely, asperately and less closely punctate; hind tarsi as long as the tibiae; mesosternal ridge low, the summit finely and strongly cariniform anteriorly but broadening into a transversely rounded polished surface posteriorly with setae toward tip as usual. Length 2.9 mm.; width 0.9 mm. South Africa (Cape Town)............... ....**stibiosa** n. sp.

CERANOTA Steph. — The characters of the description given above are drawn from a specimen kindly given me by Mr. A. Fauvel, under the name *erythroptera* Grav. It is a highly specialized genus, remarkable not only in the broad turgitical impressions, but in the very large shallow excavation occasionally observable at the bases of the second and third ventrals, which may be sexual, and the male tubercles of the first one or two and the fifth dorsal plates. In the long and well developed, externally sinuate elytra and other characters, such as the feebly inflexed hypomera and conformation of the intermesocoxal parts, it is an evident ally of *Rheochara*, and yet these two genera are placed at the opposite ends of the series in the catalogue of Heyden, Reitter and Weise. The species are rather numerous but appear to be very rare in individuals. Mr. Reitter has recently sent me a male of *ruficornis* Grav.

POLYSTOMOTA n. gen. — This genus is founded upon the European *Polystoma grisea*, of Kraatz, and there may be one or two other species of the palaearctic fauna which will prove to be congeneric. On comparing this species with *Emplenota* (*Polystoma*) *algarum*, of Fauvel, it can be readily seen that the upper surface has none of the exceptionally depressed character that distinguishes the genus *Emplenota*, and closer observation shows that the intermesocoxal parts and hind tarsi are very different in organization. In fact *Polystomota* forms a bond between the isolated *Emplenota* and the equally distinct *Rheochara*, but with characters differing so greatly from either as to necessitate a separate genus.

Aleochara Grav.

The chief special characters of this genus are the simple non-carinate mesosternum, always more or less widely separating the coxae and extending to the posterior limits of the latter, the metasternal process being short and broad or occasionally subobsolete, the strongly inflexed hypomera and the feebly modified third ventral plate, the first two being distinctly and acutely impressed. In addition, the punctuation of the pronotum is invariably rather fine and even, that of the elytra but little coarser and somewhat closer, while the punctures of the abdomen are more or less obviously coarse and notably sparse throughout the genus. The elytra are feebly sinuato-truncate at apex, without trace of external sinus. The species are somewhat heterogeneous in antennal structure, some having these organs short, thick and fusiform, while in others they are much longer, less thick and gradually enlarged to the tip, also in the nature of the male sexual characters, the apex of the sixth dorsal plate being either simple and subtruncate in that sex or pectinate as in

Maseochara, though much more finely and less strongly. I have never observed any pectination of this plate in genera having the mesosternum carinate, though it may occur. The mesosternum and its intercoxal process are margined at each side along the acetabula by a smooth polished and rather deep gutter, which is better developed than in any other genus; these channels will be alluded to below as coxal grooves. Our species are moderately numerous but do not seem to occur in the true Pacific coast fauna to any notable extent, the nearest approach known to me being the single example of *tahoensis* which I took some years ago. The sixteen species in my cabinet may be readily known by the following characters: —

Sixth dorsal plate broader at apex in the male than in the female and pectinate with short triangular teeth, simple in the female; antennae more or less stout, short or moderate in length, the outer joints strongly transverse, the last obtusely pyriform.............. 2

Sixth dorsal simple and subtruncate at apex in both sexes, broader in the male, the antennae variable.................................... 8

2 — Head obviously more than half as wide as the prothorax. Body moderately stout, subparallel, shining, the head and pronotum blackish-piceous, the elytra pale, blackish at the sides except near the base, the abdomen deep black, the apex scarcely picescent; head and pronotum finely, evenly, rather sparsely punctate, the eyes large, not prominent; antennae not quite as long as the head and prothorax, the joints four to six gradually increasing, six to eleven equal in width, stout, the subapical obtrapezoidal, scarcely twice as wide as long; prothorax three-fourths wider than long, narrowed anteriorly, the sides and base broadly rounded; elytra twice as wide as long, distinctly shorter than the prothorax, finely, rather closely but feebly punctate; abdomen as wide at base as the elytra, thence, gradually, moderately narrowed to the tip of the fifth segment and coarsely, only moderately sparsely punctate, the sides straight; mesosternal process wide, flat, not quite extending to the tip of the coxae, truncate at tip, the sides extending further than the median punctate part, which, at the apical width of the process before the tip, is nearly four times as wide as the coxal grooves; metasternal process broadly angulate, between points of tangency with the acetabula about six times as wide as long; basal joint of the hind tarsi not quite as long as the next three combined. *Male* with the sixth tergite subrectilinearly truncate and having about eleven small equal triangular teeth, each wider at base than long. Length 4.3 mm.; width 1.4 mm. Texas..................**texana** n. sp.

Head not more than half as wide as the prothorax and generally less..... 3

3 — Sixth tergite of the male broadly sinuate at tip. Body stout, shining,

dark rufous, the head more piceous, the elytra feebly clouded at the sides and near the scutellum, the abdomen blackish, the sixth segment and tip of the fifth rufous; antennae dusky, pale at base; head rather sparsely, the pronotum finely and not very closely punctured, the eyes large, the antennae short, not as long as the head and prothorax, very stout, fusoid, the tip narrower than the sixth joint which is twice as wide as long; prothorax nearly as in *texana;* elytra rather less than twice as wide as long, though obviously shorter than the prothorax, finely, rather distinctly, closely punctured; abdomen as in *texana* but with the punctures very sparse; mesosternum similarly broad between the coxae, the metasternal process still shorter and more rounded; first joint of the hind tarsi distinctly shorter than the next three combined. *Male* with the apex of the sixth tergite having about ten small equidistant teeth, the median four smaller and more acute than the three at each side. Length 4.8 mm.; width 1.5 mm. Northeastern States of America............................**fusicornis** n. sp.

Sixth tergite of the male truncate at tip.................................4

4 — Teeth of the sixth male tergite even and equal in size or nearly so toward the middle..5

Teeth of the sixth tergite uneven, the medial tooth broadened, forming a small lobe...7

5 — Median punctate part of the mesosternal process very wide, subparallel toward tip, the latter broadly arcuate and usually extending somewhat over the apex of the extremely short and broadly rounded metasternal process, with the sides of the process less advanced posteriorly, its width, at the apical width of the process in front of the latter, being about four times that of the coxal grooves. Body moderately stout, shining, blackish-piceous, the elytra more rufous, except toward the sides posteriorly and broadly in the region of the scutellum; abdomen black, the apical margin of all the segments dull rufous; antennae blackish, pale toward base, the legs pale as usual; head small, distinctly less than half as wide as the prothorax, finely, sparsely, the latter finely but rather closely, punctured; eyes large; antennae nearly as in the preceding species but less stout, the sixth joint slightly wider than the apical but scarcely twice as wide as long; prothorax two-thirds wider than long, strongly narrowed anteriorly, the sides and base broadly rounded with the basal angles obliterated as usual; elytra nearly twice as wide as long, shorter than the prothorax, the suture nearly three-fourths as long as the latter; abdomen only moderately narrowed from base to apex, the former as wide as the elytra, the punctures coarse and very sparse; hind tarsi rather distinctly shorter than the tibiae, the first joint obviously shorter than the next three combined and equal to the last two. *Male* with the comb of the sixth tergite composed of about twelve short triangular teeth, the two or three at each side generally smaller than the others. Length 4.8–6.0 mm.; width 1.2–1.65 mm. New York (Catskill Mts. and Ithaca), — H. H. Smith..................................**sternalis** n. sp.

Median punctate part of the mesosternal process less broad and more tapering behind, not extending as far posteriorly as the sides of the process and with its tip rounded or narrowly truncate, its width, at about the width of the tip of the process before the latter, being about three times that of the coxal grooves..6

6 — Form stouter than in *sternalis,* with the abdomen more strongly narrowed from base to apex, the coloration throughout nearly similar, the pronotum sometimes faintly paler toward the sides, the punctuation similar, except that the abdomen is fully as coarsely, though rather less sparsely, punctate; head somewhat larger, nearly half as wide as the prothorax, which is relatively larger than in *sternalis* but similar in form; antennae similarly short but rather stouter; elytra finely, closely, subasperately and very distinctly punctured nearly as in *sternalis* throughout. *Male* with the teeth of the sixth tergite about twelve in number, short, stout and triangular, those at the sides not appreciably smaller than the others; first joint of the hind tarsi as long as the next three together and distinctly longer than in the preceding species. Length 3.8–6.0 mm.; with 1.2–1.9 mm. New York (Long Island), Indiana, Virginia (Norfolk) and Louisiana..........................**lustrica** Say

Form slender, small in size, shining, dark rufo-testaceous, the head slightly darker, the elytra feebly shaded at the sides and toward the scutellum, the abdomen blackish, rufous at the apical margins of all the segments; legs pale, the antennae blackish, pale toward base as usual; punctures rather smaller, feebler and less close-set than in the two preceding species; head about half as wide as the prothorax, the antennae about as long as the head and prothorax combined, very stout, the joints about the sixth twice as wide as long and somewhat wider than the apical; prothorax short, fully three-fourths wider than long, rather less narrowed anteriorly than in *lustrica,* the sides and base broadly rounded, the basal angles somewhat evident though very obtuse and broadly rounded; elytra not quite twice as wide as long, the sides as long as the prothorax, the suture nearly four-fifths as long; abdomen as in *lustrica,* the punctures very coarse; hind tarsi about as long as the tibiae, the basal joint not quite as long as the next three combined. *Male* with the teeth relatively somewhat larger than in the two preceding species and only about eight in number, the one at each side usually being rudimentary. Length 3.7 mm.; width 1.1 mm. Ohio (Cincinnati).
algonquina n. sp.

7 — Body less stout than usual, shining, flavo-testaceous, the head, median parts of the pronotum and scutellar region of the elytra pale piceous; abdomen blackish, the apices of the segments pale; antennae dusky, paler toward base; punctures coarser but feeble and very sparse on the head, smaller and less sparse on the pronotum, stronger, dense and asperate on the elytra, the abdominal punctures coarse and very sparse; head fully half as wide as the prothorax, the eyes large, the antennae of the usual type though less stout, as long as the head and prothorax, the outer joints subequal in width, obtrapezoidal and distinctly less than twice as wide as long; prothorax three-fourths wider than long, only moderately narrowed anteriorly, broadly rounded at the sides and base, the basal angles broadly arcuate; two approximate anterior punctures placed transversely unusually distinct; elytra less than twice as wide as long, the sides about as long as the prothorax, the suture nearly four-fifths as long; hind tarsi distinctly shorter than the tibiae, the basal

joint unusually short, but little longer than the next two combined; mesosternum moderately wide, arcuately narrowed at tip, the median punctate part obtusely acuminate, barely reaching the apex, and, at a short distance before the apex, not quite three times as wide as the coxal grooves. *Male* with the teeth of the sixth tergite large, broadly triangular, about nine in number, the middle tooth wider and forming a rounded lobe. Length 4.5 mm.; width 1.18 mm. New York (Catskill Mts.), — H. H. Smith.................................**medialis** n. sp.

8 — Antennae somewhat as in the preceding group, short, very stout and fusoid, narrowing toward the tip, distinctly shorter than the head and prothorax combined, the joints compactly placed and very strongly transverse. Body very stout, large, parallel, shining, deep black throughout, the legs and antennae also black, the latter not distinctly paler at base, the tarsi piceous; head much less than half as wide as the prothorax, sparsely punctate, the eyes large; prothorax two-thirds wider than long, strongly rounded at base, the sides strongly converging anteriorly and less arcuate than usual, but with the basal angles broadly arcuate and obliterated, the punctures minute and rather sparse; elytra not twice as wide as long, the sides evidently longer than the sides of the prothorax, the suture two-thirds as long as the median line of the latter, the punctures close-set, strong and asperate, much larger than those of the prothorax; abdomen at base as wide as the elytra, only very slightly narrowed thence to the apex of the fifth segment, the punctures coarse and moderately sparse; hind tarsi thicker toward tip than in the preceding division, the tarsi shorter than the tibiae, very slender, with the basal joint not quite as long as the next three combined; mesosternal process very wide, the sides more converging than in the *lustrica* group, the apex arcuately narrowed. Length 5.0-7.5 mm.; width 1.6-2.3 mm. New York and Virginia to Iowa..........**lata** Grav.

Antennae longer and more slender, the outer joints much less transverse, gradually thicker to the tip, the eleventh joint being wider than any preceding..9

9 — Punctured part of the mesosternal process broad, truncate at tip and extending fully to the apex of the process.........................10

Punctured part of the mesosternal process finely acuminate at tip........11

10 — Form moderately stout, subparallel, blackish-piceous throughout anteriorly, the antennae dull rufous at base; elytra dark rufous, broadly blackish about the scutellum and at the sides, except, as usual, near the humeri; abdomen black throughout, the legs dull rufous; head distinctly less than half as wide as the prothorax, both finely, rather closely punctate; antennae longer than the head and prothorax together, rather slender toward base, moderately thick distally, the eyes moderate; prothorax two-thirds wider than long, moderately narrowed anteriorly, the sides unusually arcuate and as strongly so as the base; elytra two-thirds wider than long, finely, moderately densely and somewhat asperately punctured, the suture scarcely two-thirds as long as the prothorax; abdomen formed as usual, the punctures normally sparse but not very coarse, the impressions very minutely, sparsely punctate; sixth tergite trapezoidal, the apex broadly sinuato-truncate; basal joint of the hind tarsi as long as the last two combined, shorter than the succeeding

three; mesosternal process moderate in width in comparison with the preceding species, the metasternum very broadly, feebly angular. Length 4.8 mm.; width 1.3 mm. California (Lake Tahoe). **tahoensis** n. sp.

Form less stout, smaller in size, shining, black, the elytra bright rufous, with the inflexed flanks black; legs pale, the antennae black, piceous at base; head distinctly less than half as wide as the prothorax, finely, sparsely punctate; antennae much longer than the head and prothorax, less incrassate than in *tahoensis*, the third joint much longer than the second and relatively more elongate than in that species; prothorax three-fifths wider than long, strongly narrowed toward apex with the sides moderately arcuate, more strongly so toward base, the angles much more broadly rounded than in *tahoensis*, the base broadly arcuate; punctures fine and rather sparse; elytra short, the sides evidently shorter than those of the prothorax, the suture two-thirds as long as the median line, the punctures finer and less asperate than in the preceding species, moderately close-set; abdomen nearly similar but rather more coarsely and sparsely punctate, at base as wide as the elytra, moderately narrowed thence to the tip; basal joint of the hind tarsi somewhat shorter than the last two combined; metasternum nearly as in *tahoensis*. Length 3.7 mm.; width 1.2 mm. Kansas (Douglas Co.),—F. H. Snow..**kansana** n. sp.

11 — The punctured part abbreviated, not attaining the tip of the process by the width of the coxal grooves approximately; metasternum broadly angulate..12

The punctured part attaining the apex of the process or virtually so......13

12 — Body moderately stout and convex, shining, black, the sixth abdominal segment rufous toward base; elytra bright red, the base and sides black except at the humeri; antennae dusky, the legs pale piceo-rufous; head small, much less than half as wide as the prothorax, sparsely, feebly punctate, the antennae rather stout distally, with the second joint much shorter than the third, longer than the head and prothorax, the latter scarcely two-thirds wider than long, the sides unusually convergent anteriorly and rather feebly arcuate, the base only moderately rounded, the angles very much rounded though not obliterated, the punctures very fine and not dense; elytra shorter than the prothorax, the punctures stronger and asperate, irregular, fine and very dense along the basal concavity, elsewhere much less close-set and rather coarse; abdomen distinctly narrowed from the base, the punctures coarse and moderately sparse, very conspicuous, the sixth tergite sinuato-truncate at tip. Length 4.4 mm.; width 1.2 mm. New York (near the city)...**pleuralis** n. sp.

Body moderately stout, less parallel, the prothorax much smaller, black, the elytra bright rufous with the sides and basal margin black, the sixth abdominal segment rufous, black toward tip; legs pale red-brown, the antennae black, rufo-piceous at base; head larger, half as wide as the prothorax, finely, sparsely punctate, the antennae attaining the middle of the elytra, less incrassate distally, the subapical joints only moderately transverse, the second and third joints much elongated, the former much the shorter; prothorax less narrowed from base to apex, with the sides evenly and strongly arcuate throughout, three-fifths wider than long, finely, somewhat closely punctured; elytra distinctly wider than the prothorax, the sides equal in length to those of the latter, the suture nearly three-fourths as long as the median line, the punctures rather fine, sparse and uneven; abdomen nearly as in *pleuralis* but rather less coarsely and more sparsely punctured. Length 3.8 mm.; width 1.2 mm. Kansas (Douglas Co.),—F. H. Snow.**ellipsicollis** n. sp.

13 — Elytra pale flavo-testaceous, shaded with blackish-piceous at the sides behind the humeri...14

Elytra pale and uniform in color throughout.........................15

14 — Form moderately stout, somewhat rounded at the sides when contracted, shining, blackish-piceous, the abdomen blacker with the tip rufescent;-head small, not much more than two-fifths as wide as the prothorax, sparsely, feebly punctate; antennae much longer than the head and prothorax, gradually stout distally, the penultimate joints as usual but little wider than long, the second joint much more elongate than in *pleuralis* and almost as long as the third; prothorax shorter and more transverse than in *pleuralis* and less narrowed anteriorly; elytra shorter than the prothorax, the suture three-fourths as long as the latter, the punctures rather fine but distinct, somewhat asperate and evenly, moderately closely placed; abdomen strongly narrowed from the base, coarsely, sparsely punctured as usual, the sixth tergite narrow, truncate; hind tarsi long, almost as long as the tibiae, the first joint distinctly shorter than the next three together. Length 4.0 mm.; width 1.18 mm. Massachusetts.....................**americana** n. sp.

Form stouter, the size larger, shining, black, the elytra except on the flanks and about the scutellum, the tip of the fifth and entire sixth ventrals, bright rufous; antennae dusky, the basal parts and legs pale, the femora somewhat dusky on the under surface; head not quite half as wide as the prothorax, minutely, sparsely punctulate, the antennae long, extending to the middle of the elytra, the subapical joints slightly transverse, the third greatly elongated and very much longer than the second; prothorax strongly transverse, two-thirds wider than long, distinctly narrowed toward tip, the sides broadly rounded, rather more strongly toward base, the latter evenly but not strongly arcuate, the punctures fine, rather sparse; elytra transverse, scarcely wider than the prothorax, the outer side equal in length to the side of the latter, the suture two-thirds as long as the median line, the punctures fine, even, only feebly asperate and well separated; abdomen at base as wide as the elytra, very sparsely and only moderately coarsely punctured, only slightly narrowed thence to the tip of the fifth segment, the sixth broader than in *americana* and wholly red; hind tarsi much shorter than the tibiae, with the basal joint as long as the last two combined, shorter than the succeeding three. Length 4.5 mm.; width 1.4 mm. Colorado (Buena Vista),—H. F. Wickham.............................**postpicta** n. sp.

Form still stouter, shining, black, the elytra, except on the flanks and about the scutellum, dark piceo-rufous, the sixth ventral not much paler, piceous-black; antennae black, dark rufo-piceous toward base, the legs paler, piceo-rufous; head much larger than in *postpicta*, fully half as wide as the prothorax, the antennae distinctly longer than the head and prothorax, moderately incrassate, the second and third joints elongate as in the preceding; prothorax nearly three-fourths wider than long, rather more strongly narrowed anteriorly, with the sides less arcuate, the punctures fine but more distinct, moderately sparse; elytra larger, more evidently wider than the prothorax, the sides obviously longer than those of the latter, the suture three-fourths as long as the median line, the punctures less fine, strongly asperate and close-set throughout; abdomen at base as wide as the elytra, but little narrowed thence to the tip, the punctures coarser than in *postpicta* and equally sparse; hind tarsi similar. Length 4.4 mm.; width 1.45 mm. Montana (Kalispell),— H. F. Wickham................**montanica** n. sp.

15 — Form rather stout, parallel, piceous-black, the sides of the prothorax, entire elytra, abdominal tip and legs rufous; antennae dusky, gradually rufous toward base; head finely, sparsely, the pronotum minutely and closely punctate, the former small, scarcely more than two-fifths as wide as the latter, the eyes large as usual; antennae long, extending to the middle of the elytra, gradually, strongly incrassate to the tip, the second joint more elongate than usual but still much shorter than the third; prothorax unusually large, dilated and strongly rounded at the sides, moderately narrowed at apex, the base less arcuate than the sides, the basal angles broadly rounded; disk three-fifths wider than long; elytra not at all wider than the prothorax, and, at base, narrower, distinctly shorter than the latter, the suture three-fifths as long, the punctures fine, close-set and asperate; abdomen but little narrowed behind, at base fully as wide as the elytra; punctures moderately coarse, unusually close-set toward base but extremely sparse toward tip; metasternal process less abbreviated than usual, triangular; hind tarsi very slender, almost as long as the tibiae, the basal joint very long, equal to the next three combined. Length 3.3–4.0 mm.; width 1.15–1.3 mm. Canada (Grimsby)............................**thoracica** Csy.

Form much less stout, less parallel, polished, the head blackish-piceous, the prothorax paler piceous, the elytra throughout pale flavo-testaceous, the abdomen black, pale at tip; antennae fuscous, the basal parts and legs pale; head nearly half as wide as the prothorax, somewhat longer than wide, very finely, sparsely punctate, the antennae nearly as in *thoracica*, extending rather beyond the middle of the elytra; prothorax much smaller than in *thoracica*, strongly narrowed toward apex, rounded laterally toward base, the latter evenly arcuate as usual, the angles subobliterated; disk three-fifths wider than long, very finely, evenly but not very closely punctate; elytra much shorter than the prothorax, the the sides more diverging from the base than in the preceding, strongly closely and asperately punctate, the suture three-fifths as long as the prothorax; abdomen distinctly narrowed from base to apex, coarsely, sparsely punctured throughout, the punctures gradually smaller posteriorly; metasternal process nearly as in *thoracica* but more obtuse at apex; hind tarsi shorter than the tibiae, the basal joint not quite as long the next three combined. Length 3.2 mm.; width 1.0 mm. Rhode Island (Boston Neck)................................**collusor** n. sp.

The species as above arranged are readily divisible into three groups, one comprising the first six species of the table, the second represented by *lata* and the European *fuscipes*, which is closely related thereto but apparently wholly foreign to America, and the third by the last nine species of the table, which differ greatly from the others in the long antennae, gradually and evenly incrassate to the tip. The characters of the genus as given in the table of genera are common to all, however, and these groups could not be considered worthy of subgeneric designation in any way. The second antennal joint is always distinctly shorter than the third, generally very distinctly so but less conspicuously in some of the species of the third group. The vestiture throughout the genus is short, stiff, subdecumbent and fulvous in color, rather close and conspicuous on the anterior parts but, though still stiffer and longer, it is very sparse and less distinct on the abdomen. The male pectination of the sixth tergite in the first division of the table is more constant than in *Maseochara*, where it is subject to considerable accidental variation, but, at the same time, it is somewhat uncertain in *Aleochara* as well and is only employed in the table in conjunction with other peculiarities of structure.

The identification of *lustrica* Say, with *fuscipes* Fabr., is another instance of carelessness in systematic work, tending to render our lists of Coleoptera common to Europe and America virtually useless. The European examples of *lata* Grav., appear to have the elytra a trifle shorter than the American as a rule, and, although in my opinion perfectly conspecific, they may be the form inscribed in the lists as *Staphylinus* (*Aleochara*) *brachypterus* Fourc; if not, I do not know this species, described from France; it is not in the European catalogue of Heyden, Reitter and Weise. The European *crassicornis* Lac., and *lateralis* Heer, resemble *pleuralis* very much in outward form but do not in reality belong to the same group, the form of the antennae showing that they are members of the *lata* and *fuscipes* division of the genus. They are not specifically identical, if the specimens in my cabinet are correctly identified, one having the punctured part of the mesosternal process truncate at tip as in *tahoensis*, the other having this finely acuminate at tip as in *americana* and other allied species. *Thoracica* was originally described as a *Baryodma*, only the fine tip of the central elevated part of the mesosternal process being visible in the specimen described and presenting the appearance of a low obtuse carina; there is no trace of real carina, however, and the species is a true *Aleochara.*

Aidochara n. gen.

This genus appears to replace *Aleochara* in the fauna of the Pacific coast, although represented at present by only a single small species. The general habitus differs from that of *Aleochara* in being more parallel, with much greater development of the head and more quadrilateral prothorax. It differs further from *Aleochara* in the fact that the second antennal joint is much longer and not shorter than the third and the last joint, instead of being pyriform, is here shorter and evenly pointed from near the base, scarcely longer than wide in the type species. The mesosternal process differs in being very much narrower, obtusely pointed at tip and somewhat abbreviated, extending to about apical fifth of the coxae, the metasternal process being correspondingly longer, triangular and about as long as wide; it meets the mesosternal process at apex in much the same way as in *Aleochara*, and, similarly, the mesosternum is without vestige of carina at any point. The abdomen differs decidedly, being impressed only on the first dorsal plate, the others being flat and evenly, more closely and finely punctate throughout their extent. The type may be defined as follows: —

Moderately stout and convex, slightly shining, the surface very minutely reticulate in addition to the punctuation, black, the entire elytra and abdominal tip rufous; legs pale, the entire antennae darker, piceo-testaceous; head wider than long, fully three-fourths as wide as the prothorax, finely, rather sparsely punctate, the eyes moderately large; antennae very short, stout and compact, cylindrical beyond the middle, with the penultimate joints rather more than twice as wide as long, not as long as the head and prothorax, the latter one-half wider than long, only slightly narrower at apex than at base, the latter broadly and strongly, the sides more feebly, arcuate; basal angles very obtuse, rounded but not wholly obliterated; punctures not so fine as usual in *Aleochara*, moderately close-set, even, the disk feebly impressed transversely near the base toward the middle; elytra short, less than twice as wide as long but much shorter than the prothorax and equally wide, the sides shorter than the sides of the prothorax, the suture two-thirds as long as the median line; punctures moderately strong, somewhat close-set and feebly asperate; abdomen only slightly narrowed from the base, where it is as wide as the elytra, to the apex; hind tarsi subequal in length to the tibiae, the basal joint as long as the next two combined. Length 2.8 mm.; width 0.87 mm. California (San Francisco). **planiventris** n. sp.

I found but a single specimen of this interesting species somewhere in the vicinity of the city and appear to have made no notes as to habits. The basal part of the second tergite seems to bear traces of impression toward the axial line in certain lights, but it does not resemble the usual abdominal impressions.

Xenochara Rey.

Although similar in many characters to *Aleochara* and having much the same general habitus, the few species of this genus may be known at once by the remarkable structure of the mesosternum, which gradually becomes strongly elevated posteriorly, the process of moderate width becoming compressed toward tip; the summit of the elevation is finely acute and extends to the anterior margin of the mesosternum, forming on the anterior and scarcely elevated parts, a fine carina similar to that of *Baryodma* and allied genera. The summit of the ridge slopes posteriorly toward apex, this sloping part bearing coarse suberect setae. The metasternum is even less developed between the coxae than in *Aleochara*, and, in the European *puberula*, forms a transverse and feebly, evenly arcuate line, which is just attained on the same level by the mesosternal process, the latter being arcuato-truncate at tip, with the lateral edges reflexed nearly as in *Aleochara*. The head and antennae are nearly as in the third group of *Aleochara* referred to above, but the abdomen, though similarly impressed, differs very greatly in being finely, densely and uniformly punctate throughout. The pubescence is similarly subdecumbent and fulvous but is denser than in *Aleochara*, and the body has somewhat the same stout compact build, differing in many minor points, such as the relatively less developed prothorax with better defined hind angles. Our only species may be described as follows: —

Rather stout, convex, shining, piceo-castaneous in color, the abdomen black, each elytron obliquely shaded with dark rufous on the disk from the humeri toward the sutural apex; antennae blackish, gradually paler toward base, the legs pale; head moderate, rather wider than long, fully half as wide as the prothorax, finely, rather closely punctulate; antennae longer than the head and prothorax, gradually and moderately incrassate distally to the tip, the eleventh joint elongate, subpyriform, the tenth about one-half wider than long, the second and third elongate and equal; prothorax nearly three-fourths wider than long, the sides strongly, anteriorly converging and rather feebly arcuate, the base broadly, circularly arcuate, the angles evident though well rounded; punctures fine, even and dense throughout; elytra at the sides as long as the sides of the prothorax, continuing the curvature of the latter, but becoming paralled and arcuate posteriorly, the suture three-fourths as long as the prothorax, the punctures fine, asperate and very dense throughout; abdomen at base as wide as the apex of the elytra, rather strongly, evenly narrowed thence to the tip, less finely and closely punctate than the elytra. Length 3.75 mm.; width 1.22 mm. Texas (Galveston). [= *Baryodma bip.*, Csy.].

bipartita Csy.

This species was erroneously described as a *Baryodma*. There are two other species of the genus known to me, one inscribed in the European lists as *Xenochara puberula* Klug, differing from *bipartita* in its narrower form, less converging sides of the prothorax, relatively less dense punctuation, somewhat larger head and in the form of the metasternal projection — very broadly rounded and subobsolete in *puberula* and more abruptly and parabolically rounded at the middle in *bipartita*, — and a species identified for me by Mr. Reitter as *Baryodma milleri* Kr. The latter of these species is larger than *puberula*, blacker in color and with a smaller head, the oblique rufous band of each elytron, characterizing *puberula*, being obliterated toward the humeri, resulting in an angulate rufous apical spot. The identification of the species may not be correct, but the specimen before me was collected in the Caucasus.

Oreochara n. gen.

The obviously conical fourth papal joint isolates this genus and constitutes a very remarkable exception, not only in the present group but in the subfamily itself, where the constancy of this joint in general form is a notable peculiarity. The body is broad and heavy, nearly as in some of the stouter forms of *Aleochara*, such as *fuscipes*, but is more finely and closely sculptured, especially on the abdomen, and the prothorax is shorter and transversely subquadrilateral. Other structural features separating it from any form of *Aleochara* are the deeply and subequally impressed first three tergites and the narrowly separated middle coxae, with the process of the mesosternum not quite attaining their apices and having the smooth coxal grooves, so well developed in that genus, narrower and deeper and meeting at the tip behind the finely acuminate and finely punctate median part, which does not quite attain the truncate apex of the process. The level of the process at apex is considerably below the angulate metasternal process, the latter being overlapped slightly. The single known species may be described as follows: —

Stout, parallel, moderately convex, shining, finely, closely fulvo-pubescent, the vestiture decumbent, piceous-black, the elytra and legs throughout rather pale rufo-testaceous, the antennae dusky rufous; head rather large, nearly three-fifths as wide as the prothorax, wider than long, but little narrowed behind the eyes which are rather convex and at somewhat more than their own length from the base, the punctures fine and moderately close-set; antennae stout, not quite as long as the head and prothorax, gradually thickened from the fourth to sixth joints and thence parallel to the apex, the subapical joints not quite twice as wide as long; prothorax two-thirds wider than long, truncate at apex, broadly arcuate at base, the sides very moderately converging from base to apex and broadly, evenly arcuate; basal and apical angles obtuse but only slightly rounded, the punctures fine, rather close-set and even throughout; elytra rather more than two-thirds wider than long, broadly, arcuately impressed at base, the sides much longer than the sides of the prothorax, the suture shorter than the median line, together broadly sinuato-truncate at tip, the punctures fine but strong, very close-set; abdomen about as wide as the elytra, parallel, finely, rather closely punctate, gradually less closely toward tip, the lateral border strong; legs finely pubescent. Length 5.0 mm.; width 1.65 mm. Wyoming (Laramie),— H. F. Wickham.................................**laramiensis** n. sp.

The male sexual characters are probably feeble and of the usual form in *Baryodma* and allies. The sixth ventral in the type of *laramiensis* is broadly sinuato-truncate at tip. The scutellum does not extend behind the depressed base of the elytra and is densely and asperately punctate. The basal margin of the pronotum is finely reflexed, the surface adjoining feebly and finely impressed, then rising and convex to the general level, the portion near the base almost impunctate except toward the middle. The punctures of the head and pronotum are simple and impressed, but there are, besides the pubiferous punctures, numerous very minute punctules scattered over the interspaces; the punctures of the abdominal impressions are noticeably larger than the others but not notably coarse.

Calochara n. gen.

In this genus and the preceding we observe a transition in some respects from those having a perfectly simple and unmodified mesosternal surface to the allies of *Baryodma* with carinate mesosternum, for here we have a fine short carina in about anterior half only, as in some of the species of the next genus. In other features, however, the genus *Calochara* is an isolated type. As in *Aidochara*, the head is unusually developed. The sculpture of the anterior parts, particularly of the elytra, is rather conspicuously coarse and sparce, contrasting with the fine close sculpture of all the other genera of Aleocharae, excepting *Eucharina.* The feature which however decides its isolation among the genera with strongly inflexed hypomera, besides the form of the the third palpal joint as stated in the table, is the form of the mesosternal process, which is here finely acuminate at tip, contrasting with the truncate apex in all other genera of the first group of the subtribe. This very acute form of apex is common among the genera having feebly inflexed hypomera, but among those of the first series this is the only instance known to me, for while in the genus immediately following, the mesosternal process sometimes becomes very narrow, it is invariably truncate or sinuate at tip. The type may be recognized by the following characters:—

Form moderately stout, elongate, parallel, polished, black in color, the antennae paler toward base, the abdomen not paler at tip, the entire elytra and legs bright rufo-testaceous; head wider than long, fully four-fifths as wide as the prothorax, distinctly and rather sparsely punctate, the eyes well developed; antennae as long as the head and prothorax, gradually and rather strongly incrassate to the tip, the eleventh joint elongate, pointed and triangular, the tenth fully one-half wider than long, the second slightly shorter than the third; prothorax two-thirds wider than long, the sides parallel, becoming arcuate and converging anteriorly and posteriorly, the apex but little narrower than the base, which is broadly and strongly arcuate, the basal angles very obtuse but less rounded than in *Aleochara*, the punctures fine but strong, annular, not very close-set but evenly distributed, the two anterior discal punctures distinct; elytra one-half wider than long, slightly longer and wider than the prothorax, the suture somewhat shorter than the median line of the latter, the punctures rather coarse, even, rounded, scarcely asperate and separated by more than their own diameters; abdomen subparallel, scarcely at all narrowed from base to apex, rather finely, very sparsely punctate throughout, the depressions of the basal segments with still smaller, simple and sparse punctures; basal joint of the hind tarsi as long as the next two combined. Length 4.4 mm.; width 1.05 mm. California (Lake Co.),— Charles Fuchs.

rubripennis n. sp.

The pubescence is rather long and fulvous but sparse, and, unlike that of the preceding genera, is erect and bristling on the head and pronotum but more decumbent on the elytra; it is very sparse and inconspicuous on the abdomen, though the usual apical porrect fringe of each segment is well developed. I have seen only one specimen which is of undetermined sex.

Baryodma Thoms.

There is considerable latitude of variation among the components of this large and universally distributed genus, particularly in the extent of the mesosternal carina, sculpture, especially of the pronotum, and relative length of the tarsi and tarsal joints. It would appear at first sight as though such divergencies as observable in the pronotal sculpture of *imbricata*, *sculptiventris* and many others, where the punctures are fine, close-set and even throughout and of *bimaculata*, *verna* and others, where there is a broad convex impunctate median line defined by shallow and confusedly punctate impressions, should indicate some differences of generic weight, or that such an extreme abbreviation of the mesosternal carina as that of *castaneipennis*, or widely separated middle coxae as in *imbricata*, or very narrowly separated coxae as in *defecta*, might betoken other differences of at least subgeneric value, but such does not seem to be the case and I can find no rational means of dividing the genus, even subgenerically. The most conspicuous character in a taxonomic arrangement of the species is the sculpture of the pronotum, but such forms as the European *laevigata* Gyll., if my representative is correctly identified, are intermediate in this respect between those species with even punctuation and those having two impressed punctured series, the case being somewhat similar to that of *Sphenophorus*, of the Rhynchophora. The generic characters of *Baryodma* have been sufficiently stated in the table and need not be further considered at present. The twenty-six species before me may be separated as follows: —

Punctures of the pronotum evenly distributed throughout the disk, generally fine 2

Punctures of the pronotum more sparsely and unevenly distributed toward the sides and aggregated into two shallow longitudinal impressions at the middle, particularly evident toward base, the space between the series always devoid of punctures 13

2 — Mesosternal carina very much abbreviated, not extending posteriorly as far as the middle of the axial length of the mesosternum and scarcely more than reaching the anterior line of the middle acetabula; mesosternal process very narrow toward tip 3

Mesosternal carina abbreviated but only slightly so, the process always narrow toward tip 4

Mesosternal carina entire and attaining the tip of the process, the latter very variable in width but always at least somewhat wider than in the preceding groups 10

3 — Head and prothorax small, the latter narrower than the basal part of the elytra. Body moderately stout and convex, shining, black, the elytra and legs very dark castaneous in color; antennae blackish, gradually slightly paler toward base; head small, three-fifths as wide as the prothorax, somewhat wider than long, minutely, sparsely punctate, the eyes moderately large, slightly prominent; antennae distinctly longer than the head and prothorax, gradually and moderately incras-

sate to the tip, the tenth joint about one-half wider than long, the second and third elongate, the former slightly the shorter; prothorax small, nearly two-thirds wider than long, only moderately narrowed from base to apex, rather strongly, evenly rounded at the sides, the base broadly arcuate, the punctures fine and inconspicuous, not very close; elytra large, scarcely one-half wider than long, distinctly wider and longer than the prothorax, the suture about equal in length to the latter, the punctures fine, close-set and asperulate; vestiture of the anterior parts rather sparse, fine, fulvous and subdecumbent; abdomen at base not quite as wide as the prothorax, only feebly narrowed thence to tip, rather finely, sparsely punctured, the punctures becoming very fine and sparse apically, the basal impressions with extremely minute, sparse and nude punctules; basal joint of the hind tarsi scarcely as long as the next two combined. Length 3.5–3.8 mm.; width 1.0–1.1 mm. British Columbia (Glenora) to Middle California (Lake Co.). [= *Aleochara cast.* Esch.] .... **castaneipennis** Esch.

Head and prothorax relatively larger, the latter as wide as the base of the elytra. Body evidently stouter, similar in coloration and vestiture, except that the elytra are only just visibly paler and piceous; head wider than long, sparsely punctulate, three-fifths as wide as the prothorax; antennae attaining the middle of the elytra, the tenth joint scarcely a third wider than long; prothorax proportioned nearly as in the preceding, but rather more narrowed from base to apex, the sides slightly less arcuate, the punctuation fine and not dense; elytra still larger, much longer, and, near the middle, distinctly wider than the prothorax, the suture fully as long as the latter, the punctures rather fine but more distinct, close-set and asperate; abdomen at base as wide as the elytra, somewhat distinctly narrowed thence to the tip; sparsely punctured and polished nearly as in *castaneipennis;* basal joint of the hind tarsi as long as the next two combined. Length 3.4 mm.; width 1.2 mm. California (Pomona), — H. C. Fall .... **robustula** n. sp.

4 — Abdomen rather finely punctate and polished, the punctures notably sparse. Pacific Coast and Rocky Mountains 5

Abdominal punctures much more close-set but not dense. Atlantic regions 9

5 — Mesosternal carina much abbreviated, not attaining the tip of the process by more than twice the width of the process at the posterior end of the carina. Body moderately stout, polished, piceous, the abdomen blackish, the elytra and legs pale rufous, the antennae fuscous, pale toward base; vestiture rather sparse and inconspicuous; head small, as long as wide, one-half as wide as the prothorax, the eyes well developed but at an unusual distance from the base; antennae as long as the head and prothorax, gradually, rather strongly incrassate to tip, the tenth joint scarcely twice as wide as long, the second and third elongate and subequal; prothorax of the usual transverse form and fine, rather sparse punctuation, but unusually narrowed from base to apex, the sides and base rounded; before the middle of the base there are two feeble approximate impressions, homologous with the discal lines of *bimaculata* and allies; elytra scarcely one-half wider than long, subequal in length and width to the prothorax, the suture four-

fifths as long as the latter, the punctures asperate and moderately strong but not very close-set; abdomen at base scarcely as wide as the elytra, only moderately narrowed thence to the tip; basal joint of the hind tarsi rather longer than the next two combined, joints two to four equal, the tarsus distinctly shorter than the tibia. Length 3.5 mm.; width 0.95 mm. British Columbia (Glenora), — H. F. Wickham.
glenorana n. sp.

Mesosternal carina less abbreviated, not attaining the tip of the process by about the apical width of the latter, and sometimes much less........6

6 — Elytra evidently much longer than the prothorax......................7

Elytra about equal in length to the prothorax or at least not conspicuously longer, the form more elongate, parallel and linear....................8

7 — Head small, half as wide as the prothorax, the sides of the latter strongly converging and evenly, moderately arcuate from base to apex; antennae longer and less incrassate, longer than the head and prothorax, the tenth joint less than one-half wider than long, the second and third elongate and subequal. Body only moderately stout, more parallel than in *rotundicollis*, polished, black, the elytra dark piceo-rufous, the legs dark piceous, the antennae blackish, not distinctly paler at base; head and prothorax finely, sparsely punctulate, the latter less transverse than usual, scarcely one-half wider than long, the pubescence very fine, sparse and inconspicuous; elytra parallel, scarcely wider but evidently longer than the prothorax, the suture about as long as the latter, the punctures fine, unusually feeble and widely separated, not at all dense; abdomen at base nearly as wide as the elytra, moderately narrowed thence to the apex, very finely and sparsely punctate, polished; hind tarsi almost as long as the tibiae, the basal joint as long as the next two combined. Length 3.2–3.8 mm.; width 0.82–1.0 mm. California (San Francisco to Humboldt Co.)..........................**uvidula** n. sp.

Head larger, three-fifths as wide as the prothorax, the sides of the latter very feebly converging from base to apex and more rounded; antennae shorter, more compact and incrassate, as long as the head and prothorax, the tenth joint nearly twice as wide as long, the second and third elongate, the former slightly the shorter. Body slightly stouter, less parallel, shining, piceous, the abdomen black, the elytra piceo-rufous; antennae black, piceous at base, the legs paler, piceous; head and pronotum minutely, sparsely, the latter less sparsely, punctate, the eyes rather distant from the base; prothorax small, one-half wider than long, strongly rounded at base, the disk with two feeble approximate longitudinal impressions toward base; elytra large, much wider as well as longer than the prothorax, the suture slightly longer than the median line of the latter, the punctures fine, asperulate and close-set, much less separated than in the preceding species; abdomen at base distinctly narrower than the elytra, moderately tapering, very finely, sparsely punctured; hind tarsi somewhat shorter than in *uvidula*. Length 3.4 mm.; width 1.0 mm. Queen Charlotte Island.....**rotundicollis** n. sp.

Head rather more than half as wide as the prothorax, the latter transversely elliptical, with the sides only just visibly converging from base to apex and strongly, evenly arcuate; antennae very well developed, gradually and strongly incrassate to the tip, the tenth joint less than twice as wide as long, the eleventh conoidal, ogivally pointed, longer than the two preceding together, the second and third moderately elongate and subequal. Body moderately stout, subparallel, pale brownish-testaceous in color, the elytra still brighter and rather more rufous, the abdomen piceous; prothorax rather small, slightly narrower than the elytra, fully one-half wider than long, finely, evenly and somewhat sparsely punctured, the pubescence rather long, sparse but distinct; elytra at the sides much longer than the sides of the prothorax, the suture scarcely shorter than the median line, the punctures fine, subasperate and only moderately dense, the pubescence distinct; abdomen nearly as wide as the elytra, narrowing slightly behind the middle, the punctures fine, moderately close-set basally but becoming gradually very sparse on the last four segments, the punctures of the impressions slightly larger and rather less sparse than the others, and, as usual, bearing only infinitesimal hairs; basal joint of the hind tarsi as long as the next two combined. Length 2.9 mm.; width 0.85 mm. New Mexico (Santa Fé Cañon),— F. H. Snow................**acomana** n. sp.

8 — Larger and more convex, shining, black, the elytra and legs rather pale rufous, the antennae piceo-rufous, pale toward base; vestiture sparse and rather inconspicuous, fulvous as usual; head well developed, three-fifths as wide as the prothorax, and, like the latter, finely and sparsely punctulate; antennae scarcely as long as the head and prothorax, gradually, strongly incrassate to the tip, compact, the tenth joint three-fifths wider than long, the second and third elongate, the former but slightly the shorter, prothorax large, less transverse, two-fifths wider than long, moderately narrowed from base to apex with the sides strongly arcuate, the base arcuate as usual, the angles very obtuse but evident; elytra only two-fifths wider than long, the sides as long as those of the prothorax, the suture three-fourths as long as the median line, the punctures fine, feebly asperate and well separated; abdomen nearly as wide as the elytra, parallel and straight at the sides, not at all narrowed posteriorly from the base, finely, very sparsely punctate; hind tarsi distinctly shorter than the tibiae, the basal joint not quite as long as the next two combined. Length 3.8–4.4 mm.; width 0.9–0.98 mm. British Columbia (Kamloops and Glenora),— H. F. Wickham..............................**mannerheimi** n. sp.

Smaller, more depressed, polished, black, the elytra scarcely visibly paler, piceous, the legs paler, rufous; antennae deep black, not at all paler at base; pubescence fine, decumbent, sparse and inconspicuous; punctures anteriorly fine and notably sparse, of the elytra but little larger, asperulate and well separated, of the abdomen fine and very sparse, but larger, rounded and moderately sparse in the basal depressions; head moderate, scarcely more than half as wide as the prothorax; antennae less developed than in *mannerheimi*, less incrassate, not quite as long as the head and prothorax, the tenth joint scarcely more than a third wider than long, the second much shorter than the third; prothorax short and strongly transverse, two-thirds wider than long, moderately narrowed anteriorly and rather strongly rounded at the sides, the base circularly arcuate; elytra strongly transverse, very slightly wider and somewhat longer than the prothorax, the suture just visibly shorter than the median line; abdomen not quite as wide as the elytra, the sides parallel and straight, feebly converging through the last two or three segments; hind tarsi very slender as usual, as long as the tibiae, which are shorter than usual, the basal joint as long as the next two combined. Length 3.3 mm.; width 0.87 mm. Queen Charlotte Island (Massett),— J. H. Keen..............................**insulana** n. sp.

9 — Slender, convex, subparallel, shining, piceous-brown in color throughout, the abdomen rather blackish and the elytra somewhat paler than the anterior parts; legs pale, the antennae dark red-brown, paler toward base; pubescence fine, decumbent, short, rather dense on the elytra but not conspicuous; head and prothorax minutely punctulate, the former sparsely, the latter closely but insconspicuously; head but little more than half as wide as the prothorax, the antennae moderate, somewhat strongly incrassate, the second and third joints only moderately elongate and equal, the eighth almost twice as wide as long; prothorax one-half wider than long, rather strongly narrowed from from base to apex, the sides rounded toward base, the latter arcuate, the disk even; elytra transverse and somewhat wider and shorter than the prothorax, the suture three-fourths as long as the latter, the punctures fine, strongly asperate and dense; abdomen at base nearly as wide as the elytra, but little narrowed thence to the apex, finely, closely punctulate, sparsely at the tips of the segments, nearly throughout the fifth and sixth; mesosternal process very slender toward tip, the carina not attaining its apex by nearly twice its width at the carinal tip; metasternal process angulate as usual, about one-third as long as the transverse distance between the ends of the acetabula; hind tarsi with the basal joint somewhat longer than the next two combined. Length 3.4–4.0 mm.; width 0.77–1.15 mm. New York (Catskill Mts.),— H. H. Smith..**defecta** n. sp.

10 — Abdominal sculpture simply punctate, the interspaces polished; elytra uniform in coloration..11

Abdominal sculpture imbricate, each elytron with an apical pale spot.....12

11 — Abdominal impressions moderate as in the preceding species, and scarcely more conspicuously punctured than the remainder of the surface. Body slender, black, shining, the elytra and fine apical margins of the ventrals dull rufous or piceo-rufous; legs paler, testaceous, the antennae dusky, pale toward base; punctures of the head and pronotum fine, sparse and inconspicuous, of the elytra less fine, rather strongly asperate and close-set, of the abdomen fine but strong, close-set except at the apical margins of the segments and nearly throughout the fifth and sixth, where they become sparse; vestiture fulvous, decumbent, moderately distinct; head small, not quite half as wide as the prothorax, the antennae about as long as the head and prothorax, somewhat strongly incrassate to the tenth joint which is three-fifths wider than long, the eleventh scarcely as wide as the tenth, obtusely ogival in form and longer than the two preceding combined, the second and third elongate and equal; prothorax well developed, scarcely one-half wider than long, strongly narrowed from base to apex, the sides moderately arcuate, the base rounded; elytra not at all wider than the prothorax and about of equal length, the suture very slightly shorter;

abdomen elongate, parallel, nearly as wide as the elytra; mesosternal process only moderate in width, the carina stronger than in the preceeding groups and similar to the following, the metasternal process very short, broadly parabolic; hind tarsi much shorter than the tibiae, the basal joint as long as the next two combined. Length 3.2-4.5 mm.; width 0.7-0.9 mm. British Columbia (Kamloops and Glenora), — H. F. Wickham..**affluens** n. sp.

Abdominal impressions unusually large, deep and extremely coarsely, subconfluently punctate, the remaining part finely, closely punctate but polished. Body stouter, linear, parallel, black, the elytra scarcely visibly paler, piceous, the legs blackish-piceous, the antennae black, but little paler at base; vestiture fine, short, decumbent, close but not very conspicuous; punctures of the head and pronotum very fine, extremely close-set on the latter, less so on the former, fine, asperate and very dense on the elytra; head half as wide as the prothorax; antennae somewhat longer than the head and prothorax, rather stout, gradually incrassate to the tip, the second joint shorter than the third; prothorax transversely suboval, not much narrowed from base to apex and strongly rounded at the sides; elytra transverse, slightly shorter and evidently wider than the prothorax, the suture fully two-thirds as long, the apical margin finely rufescent; mesosternal process moderately wide but not extending to the posterior limits of the coxae, the metasternal process longer than usual, narrowly rounded under the tip of the mesosternal process, with its margins thickened and much elevated; hind tarsi much shorter than the tibiae, which are unusually finely and closely pubescent, the basal joint long, distinctly longer than the next two combined. Length 3.7-4.4 mm; width 0.85-1.05 mm. New York (Ithaca and Catskill Mts.) to North Carolina (Asheville).

sculptiventris Csy.

12 — Moderately stout, sublinear, polished, convex, deep black, the elytra not distinctly paler, each with a small rufous spot at apex near the suture; legs blackish-piceous, the antennae black, somewhat piceous at base; vestiture moderately distinct, rather sparse, decumbent; punctures of the head very fine and remote, of the pronotum nearly as fine and notably sparse, of the elytra fine but rather strongly asperate and close-set, of the abdomen fine and somewhat close-set throughout, the punctures evenly in quincunx order and joined anteriorly and posteriorly by fine lines, forming a regular imbricate sculpture; head fully as long as wide, not quite half as wide as the prothorax, the antennae unusually slender, attaining the middle of the elytra, the tenth joint only very slightly wider than long, the eleventh longer than the two preceding combined, the second much elongated and — very exceptionally in the genus — slightly longer than the third; prothorax transversely suboval, strongly narrowed from base to apex, the sides only moderately arcuate, the base broadly rounded; elytra slightly longer than the prothorax and about equally wide, the suture equal thereto in length; abdomen long, parallel, not quite as wide as the elytra, the impressions normal; mesosternal process unusually wide, normal in length, the metasternal process broad and very obtuse; hind tarsi short, very much shorter than the tibiae, which are more slender and more coarsely and sparsely

setulose than in *sculptiventris*, the basal joint unusually short, shorter than the fifth and shorter than the next two combined. Length 3.3-4.2 mm.; width 0.73-1.0 mm. California (San Francisco, Humboldt Co., and Lake Tahoe), Nevada (Reno) and Montana (Kalispell).
imbricata n. sp.

Moderately stout, shining, nearly similar in general form, coloration and sculpture to the preceding, the head larger, rather more than half as wide as the prothorax, the antennae somewhat less elongate though evidently longer than the head and prothorax, the tenth joint more evidently wider than long, the eleventh much longer than the two preceding combined, the second and third subequal; prothorax less transverse, about two-fifths wider than long, the sides less converging from base to apex and more rounded; elytra about equal in length and width to the prothorax, the suture four-fifths as long as the latter, the pale spots somewhat larger and more anteriorly angulate; abdomen nearly similar throughout; mesosternal process nearly similar but arcuately narrowing toward apex through a greater distance from the tip, the metasternal process equally broad and obtuse; hind tarsi relatively longer, the tibiae shorter, the basal joint relatively much abbreviated, scarcely more than two-thirds as long as the fifth and one-half longer than the second. Length 3.0 mm.; width 0.85 mm. New Jersey.
idonea n. sp.

More slender, linear, the body and antennae black, the latter piceous toward base; legs blackish, paler distally, the elytra black, without distinct maculation but becoming broadly and suffusedly piceo-testaceous toward the inner apical angles; sculpture and vestiture throughout nearly as in the two preceding species; head about half as wide as the prothorax; antennae long, feebly incrassate, nearly as in *imbricata* but with the tenth joint more distinctly wider than long and the second and third equal; prothorax nearly as in *imbricata*; elytra transverse, much shorter than in *imbricata*, shorter than the prothorax but fully as wide, the suture scarcely four-fifths as long; abdomen nearly similar; mesosternal process nearly similar but with the carina less acute and the tip not concealing the apex of the metasternal process, which is evidently more narrowly parabolic in form; hind tarsi not so markedly shorter than the tibiae as in *imbricata* and more elongate, the tibiae relatively shorter, the very short basal joint nearly as in *idonea*, the first three almost uniformly decreasing in length. Length 3.5 mm.; width 0.77 mm. California (Colorado Desert at Salton), — H. F. Wickham.
salicola n. sp.

13 — Mesosternal process wide as usual....................................14

Mesosternal process very narrow; species small in size; punctures of the abdominal impressions much finer....................................21

14 — Sides of the prothorax strongly converging from base to apex and only moderately arcuate....................................15

Sides of the prothorax feebly converging and strongly arcuate; antennae rather strongly incrassate, with the tenth joint about twice as wide as long, the second and third moderately elongate and subequal; basal joint of the hind tarsi about as long as the next two combined.......20

15 — Elytra closely punctured; punctures toward the sides of the pronotum closer and more distinct...16

Elytra sparsely and less strongly punctate, the pronotum finely, very sparsely and sometimes barely perceptibly punctate....................19

16 — Abdomen extremely densely punctured and opaque. Body small in size, slender, black, the elytra piceous-black, rufescent along the apical margin, more broadly toward the suture; legs dark rufo-piceous, the antennae black, picescent toward base; head relatively well developed, three-fifths as wide as the prothorax; antennae rather strongly incrassate distally, as long as the head and prothorax, the second and third joints elongate, equal, the tenth fully twice as wide as long, the eleventh large, obtusely conoidal, distinctly longer than the two preceding combined; prothorax one-half wider than long, not wider than the base of the elytra, the punctures toward the sides unusually sparse and feeble in the present group; elytra transverse, somewhat wider than the prothorax, the sides slightly longer than the sides of the latter, the suture three-fourths as long as the median line, the punctures small, asperate and close-set but much less dense than those of the abdomen, the latter at base not quite as wide as the elytra; mesosternal process squarely truncate at tip, the latter only tangentially attaining the broadly, evenly parabolic metasternal process and with the angles right and only very narrowly rounded; hind tarsi distinctly shorter than the tibiae, the basal joint equal in length to the next two combined. Length 3.3 mm.; width 0.73 mm. New Mexico (Las Vegas), Arizona and California (Humboldt Co.)..........................**densiventris** n. sp.

Abdomen very closely and strongly punctured, the punctures similar to those of the preceding species but narrowly separated, the interspaces polished..17

17 — Antennae unusually short, rather strongly incrassate distally, extending scarcely beyond the middle of the prothorax, the second and the third joints short, stout and equal, each much less than twice as long as wide in the female but longer in the male, feebly obconical, the fourth distinctly transverse, the tenth about twice as wide as long, the eleventh still broader, very obtusely conoidal, longer than the two preceding combined. Body small, rather stout, polished, piceous-black, the elytra rufo-piceous with the region toward the suture nubilously more flavate, except near the base, the abdomen deep black; head rather more than half as wide as the prothorax, the latter larger than in the preceding, less than one-half wider than long, the punctures laterally moderately distinct, the usual large discal puncture at each side conspicuous; elytra slightly wider than the prothorax, the sides somewhat longer than the sides of the latter, the suture two-thirds as long as the median line; abdomen subequal in width to the elytra, parallel; basal joint of the hind tarsi rather short, three-fourths as long as the fifth and much shorter than the next two combined. Length 3.2 mm.; width 0.86 mm. California (Monterey Co.).......................**obsolescens** n. sp.

Antennae having the second and third joints much more elongate, the former somewhat the shorter of the two....................................18

18 — Basal joint of the hind tarsi unusually short, three-fourths as long as the last, the first three joints decreasing uniformly in length. Body

rather small, only moderately stout, polished, black, the elytra blackish-piceous, not distinctly nubilate with paler at any part, the legs pale piceo-rufous, the antennae black, piceous toward base; head three-fifths as wide as the prothorax, the antennae short, rapidly and strongly incrassate distally, scarcely one-half longer than the prothorax, the tenth joint fully twice as wide as long; prothorax about one-half wider than long, the punctures toward the sides somewhat feebly impressed and inconspicuous, the two large sublateral punctures before the middle distinct; elytra slightly wider than the prothorax, the sides evidently longer than the sides of the latter, the suture nearly three-fourths as long as the median line; abdomen subequal in width to the elytra, parallel; metasternal process unusually narrowly rounded. Length 3.0–3.9 mm.; width 0.72–0.95 mm. New Mexico (Las Vegas)...................................**recta** n. sp.

Basal joint of the hind tarsi fully as long as the next two combined; metasternal process much more broadly rounded. Body stout, parallel, polished, black, the elytra scarcely at all paler, each with a large, clearly defined and anteriorly rounded spot at apex and near the suture of flavo-testaceous; legs piceo-rufous, the antennae black, but little paler at base; head rather small, not quite half as wide as the prothorax, sparsely but somewhat strongly punctured, the antennae longer and less incrassate than usual, almost as long as the head and prothorax, the tenth joint evidently less than twice as wide as long; prothorax well developed, three-fifths wider than long, distinctly, rather closely but somewhat unevenly punctured toward the sides, the sublateral puncture rather before the middle as usual; elytra at the sides about as long as the sides of the prothorax, the suture two-thirds as long as the median line; abdomen as wide as the elytra, closely and strongly punctured throughout, gradually more coarsely in the impressions of the the basal tergites. Length 3.8–6.4mm.; width 1.05-1.68 mm. Entire northern parts of the continent, from the Atlantic to the Pacific, descending on the Pacific coast as far as Monterey, and, along the highlands of the Rocky Mountains to Guanajuato, Mexico.**bimaculata** Grav.

19 — Form moderately stout, parallel, highly polished, deep black, the elytra scarcely at all paler but each with a large rounded flavate spot near the suture, beginning slightly before the middle and expanding to the apical margin, along which it extends narrowly to the outer margin; legs and basal parts of the antennae piceo-rufous, the remainder of the latter blackish; head fully half as wide as the prothorax, having a few fine and remotely scattered punctures; antennae one-half longer than the head, moderately incrassate, the third and fourth joints elongate and subequal, the tenth rather less than twice as wide as long; prothorax large, one-half wider than long, the strongly converging sides feebly and evenly arcuate, the base strongly rounded throughout; elytra at the sides as long as the sides of the prothorax, the suture two-thirds as long as the median line, the punctures fine, evenly and sparsely distributed, feebly asperulate; abdomen as wide as the elytra, parallel, finely, rather sparsely punctulate, the subbasal impressions coarsely but not densely so; mesosternal process unusually wide; basal joint of the hind tarsi as long as the next two combined.

Length 3.1-4.6 mm.; width 0.85-1.22 mm. Texas (Galveston, Waco, Austin and Brownsville) and Mexico (Guanajuato)...**nitidicollis** n. sp.

Var. A — Abdominal and elytral sculpture rather stronger and less sparse, the elytral spots much reduced and forming a fine apical margin, somewhat broadened toward the suture. Texas (Austin) and California (Yuma).

Form slender, the size minute, polished, piceous in color, the abdomen blackish, each elytron with a relatively still larger subsutural flavous spot; legs pale flavo-testaceous, the antennae blackish, piceo-rufous toward base; head three-fifths as wide as the prothorax; antennae as long as the head and prothorax, rather strongly incrassate distally, the tenth joint fully twice as wide as long, the second and third joints moderately elongate, the former distinctly the longer; prothorax in form and sculpture nearly as in *nitidicollis;* elytra at the sides slightly longer than the sides of the prothorax, the suture four-fifths as long as the median line, the punctures fine and extremely sparse; abdomen as wide as the elytra, parallel, the punctures very sparse; basal joint of the hind tarsi much shorter than in the preceding species, distinctly shorter than the next two together. Length 2.25 mm.; width 0.65 mm. Texas (Brownsville),—H. F. Wickham..**nanella** n. sp.

20 — Elytra unusually short, the sides not as long as those of the prothorax. Body only moderately stout, parallel, shining, black, the elytra pale piceo-rufous, becoming nubilously more flavate toward the suture and apex of each; legs pale red-brown, the antennae black, only feebly picescent at base; head relatively well developed, three-fifths as wide as the prothorax, the antennae not as long as the head and prothorax, with the last joint thickest, pyriform and as long as the two preceding combined; prothorax small, transverse, the apex only slightly narrower than the base, the sides strongly arcuate, the punctures laterally very distinct and somewhat close-set; elytra finely, closely and asperately punctate as usual, the suture two-thirds as long as the median line of the prothorax; abdomen nearly as wide as the elytra, strongly, rugosely and closely punctured as usual in this group of the genus. Length 3.8 mm.; width 0.93 mm. California (Newhall)..**innocua** n. sp.

Elytra normally long, the sides as long as those of the prothorax; form stouter, the abdomen but little narrower than the elytra and parallel as usual. Body polished, black, the elytra piceous-black, each with a very large subflavous pale spot in the position of that of *bimaculata* but less distinctly defined; legs rufo-piceous, the antennae black throughout; head distinctly more than half as wide as the prothorax, the antennae much shorter than the two together, strongly incrassate, the eleventh joint longer than the two preceding combined; prothorax larger and less transverse, about one-half wider than long, the sides subparallel and strongly arcuate, the punctures toward the sides much finer, somewhat sparser and notably less conspicuous than in *innocua;* elytra well developed, finely, densely and asperately punctate, the suture two-thirds to nearly three-fourths as long as the prothorax; abdomen with sculpture similar to *bimaculata,* but rather finer and noticeably less dense. Length 3.3-3.8 mm.; width 0.9-1.06 mm. Arizona (Benson),— G. W. Dunn....................**deserticola** n. sp.

21 — Elytra black, each maculate with rufous apically near the suture...22

Elytra nearly uniform in color throughout or at least never definitely maculate..23

22 — Form moderately stout, polished, black, the elytra each with a small rounded rufous spot near the suture, occupying apical two-fifths to fourth; antennae black throughout, the legs blackish-piceous; head three-fifths to nearly two-thirds as wide as the prothorax, finely but distinctly, sparsely punctate, the antennae moderately incrassate to the tip, nearly as long as the head and prothorax, the second and third joints elongate, subequal, the former slightly the longer, the tenth fully three-fifths wider than long, the eleventh longer than the two preceding combined, stout and subpyriform; prothorax one-half or more wider than long, the sides distinctly converging from base to apex and somewhat arcuate, the punctures toward the sides fine and somewhat sparse but strong and distinct, the sublateral puncture of the preceding section not distinct; elytra well developed, longer than usual, at the sides much longer than the sides of the prothorax, the suture fully as long as the median line, the punctures somewhat coarse, deep, only slightly asperate and well separated though not very sparse; abdomen subparallel, not quite as wide as the elytra, finely, subrugosly and somewhat closely punctured throughout, not more coarsely in the subbasal impressions; hind tarsi very slender, the basal joint about as long as the next two combined. Length 2.5-3.8 mm.; width 0.78-0.98 mm. Entire northern regions of the continent, from the Atlantic to the Pacific, apparently extending less to the southward than *bimaculata*.
verna Say

Form less stout, smaller in size, polished, black, the elytra each with an elongate nubilously rufescent spot in about apical half near the suture; legs and antennae black or piceous-black; head about three-fourths as wide as the prothorax, very finely, sparsely punctate, the antennae one-half longer than the head, somewhat strongly incrassate distally, the second joint long, very much longer than the third; prothorax a third to two-fifths wider than long, the sides rather strongly converging from base to apex and distinctly to feebly arcuate, the punctures very sparse, nearly as in *verna* but very fine or almost obsolete; elytra somewhat shorter than in *verna*, at the sides scarcely longer than the sides of the prothorax, the suture very distinctly shorter than the median line, the punctures fine but distinct, even, not very close-set; abdomen nearly as wide as the elytra, subparallel, finely, rather sparsely punctate, the punctures of the impressions not differing from the others and fully as sparse; impression of the third tergite almost completely obsolete; basal joint of the hind tarsi very short, one-half longer than the second and barely three-fourths as long as the fifth. Length 1.4-2.25 mm.; width 0.55-0.63 mm. California (San Francisco to Pomona) and Iowa..**minuta** n. sp.

23 — Form moderately stout, parallel, polished, deep black, the abdomen not paler at tip, the elytra pale rufous, feebly clouded with blackish on the flanks and toward the scutellum; legs piceous-black, the antennae black throughout; head nearly three-fifths as wide as the prothorax, remotely and obsoletely punctate, the antennae somewhat longer than

the head and prothorax, gradually and moderately incrassate from the base of the fourth joint, the latter fully as long as wide and as long as the fifth, the tenth not twice as wide as long, the eleventh unusually elongate, almost equaling the three preceding combined, the second and third moderately elongate, subequal; prothorax as wide as the elytra, wider than the base of the latter, somewhat more than one-half wider than long, strongly convex, distinctly narrowed from base to apex with the sides broadly and evenly arcuate, the punctures toward the sides very fine, remotely scattered, the two median impressions subobsolete, feebly punctured and only traceable toward base; elytra at the sides evidently longer than the sides of the prothorax, the suture four-fifths as long as the median line, the punctures moderately fine, very strongly asperate and close-set throughout; abdomen as wide as the elytra, but slightly tapering, finely but strongly, asperately and rather closely punctate, the punctures of the impressions larger and more circular than the others; hind tarsi as long as the tibiae, the basal joint somewhat longer than the next two together, two to four decreasing in length; mesosternal process narrowly subtruncate. Length 4.0 mm.; width 0.95 mm. Colorado (Breckenridge), — H. F. Wickham.

suffusa n. sp.

Form rather slender, polished, black, the elytra very dark rufo-piceous, almost imperceptibly shaded with black at the sides and broadly toward the scutellum; legs and antennae black or piceous-black; head nearly two-thirds as wide as the prothorax, scarcely at all punctate, convex, the antennae much smaller than in *suffusa*, two-thirds longer than the head, feebly incrassate, the second joint longer than the third; prothorax two-fifths wider than long, strongly narrowed from base to apex, the sides evenly and only slightly arcuate, the punctures extremely remote and subobsolete laterally, the two median impressed lines feebly punctate and obsolescent; elytra at the sides but little longer than the sides of the prothorax, the suture four-fifths as long as the median line, the punctures moderate in size, asperate and somewhat close-set; abdomen not quite as wide as the elytra, subparallel, the punctures sparse, rather closer toward base, elongate, parallel and aciculate in form except in the impressions; basal joint of the hind tarsi as long as the next two combined, two to four rapidly decreasing in length; mesosternal process unusually narrow, gradually narrowed almost to a point at tip, the latter however very narrowly truncate, the carina entire as usual. Length 3.5 mm.; width 0.82 mm. Colorado (Leadville).

acuminata n. sp.

The species above described may be assigned to six well defined groups, the first of which (1) includes all those from *castaneipennis* to *defecta*, together with the European *cuniculorum* Kr., according to the identification of Mr. Fauvel, and is characterized by a narrow mesosternal process, very fine and more or less incomplete carina and generally fine and sparse abdominal punctures, those of the impressions being extremely minute in some cases. The second group (2), consisting of *affluens* alone, is characterized by a broader though still rather narrow, process, normal and entire carina and closer abdominal sculpture, with the close-set punctures of the impressions moderately coarse and the third group (3), composed of *sculptiventris*, is remarkably isolated by reason of the unusually coarse deep and subconfluent punctures of the abdominal impressions, the latter being deeper than in any other group and also because of the normally wide though rather abbreviated process with correspondingly longer metasternal process, normal carina and fine dense punctures throughout. The fourth group (4) consists of the three species from *imbricata* to *salicola*, and is distinguished by a peculiar imbricate sculpture of the abdomen, almost similar to that of the European *bipunctata* Ol., where, however, the mesosternal process is much narrower and the basal joint of the hind tarsi normally elongate; the process is of unusual width and the basal joint of the hind tarsi very short in the American species. The species from *densiventris* to *obsolescens* constitute another group (5), characterized by the bi-impressed, sparsely and irregularly punctate pronotum and normally wide process, and, finally, *verna* and others of the table, the European *nitida* Grav., and *bilineata* Gyll., and a small, apparently undescribed Mexican species before me, constitute a special group (6), resembling the preceding in pronotal sculpture but differing in the narrow, though normally carinate, process, and generally finer sculpture of the abdominal impressions; the process is indeed as narrow as in the first group, but, except in *acuminata*, with less converging sides. The last two groups are the only ones containing species of very wide grographic distribution, all the others being confined to special faunal regions. A very small species in my cabinet, taken near the city of Mexico, constitutes still another distinct group, having the fine abbreviated carina and narrow process of the first group above defined, with the medially biseriate and otherwise sparsely and unevenly punctate pronotum of the fifth and sixth groups, this being an additional reason why the biseriately impressed pronotum of the last two groups cannot be considered a generic character in any sense.* The species are readily distinguishable among themselves, as a rule, by structural peculiarities relating to the intermesocoxal parts, sculpture, antennal characters, length of the basal joint of the hind tarsi and other easily observed features.

Verna has been inscribed in our lists under the name *nitida* Grav., but is by no means identical, having longer and more closely punctured elytra and more finely and closely sculptured abdomen; it is given in the European catalogue as a species different from *nitida*, but I have seen no European representatives. It varies noticeably, not only in size but to some extent in development of the elytra and density of sculpture, as might be inferred from its very extended range, although *bimaculata*, which is even more widely distributed, is notably less plastic. The southern California *innocua* closely approaches *bimaculata* Grav., in general structure, but is rather less stout, having also obviously shorter and paler elytra and a smaller, more parallel prothorax. The male of *obsolescens* possesses one character which, as far as known to me, is unique in the subtribe, the sixth ventral plate having at tip a small, abruptly incised and acutely angulate cleft,

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* This species may be described as follows: —

Form moderately stout, parallel, convex, shining, deep black, the elytra scarcely visibly picescent, not definitely maculate, the legs and antennae black; head fully three-fifths as wide as the prothorax, finely, remotely punctate, the antennae barely one-half longer than the head, strongly incrassate and compact distally, the second joint much longer than the the third and almost as long as the next two combined; prothorax nearly one-half wider than long, slightly narrower from base to apex, with the sides evenly and strongly arcuate, the base arcuate, the angles obtusely rounded, the punctures very sparse, disposed as in *verna* throughout; elytra scarcely at all wider than the prothorax and about as long, the suture not quite as long as the median line, the punctures and pubescence as in *verna;* abdomen parallel, nearly as wide as the elytra, finely, rather sparsely punctured throughout, the punctures of the impressions not larger; mesosternal process narrow, the carina very much abbreviated, not extending quite to the middle of the acetabula; hind tarsi as long as the tibiae, the basal joint fully as long as the fifth and as long as the next two together. Length 2.7 mm.; width 0.83 mm. Mexico (Federal District)..**composita** n. sp.

twice as deep as wide and about a fourth as long as the segment. The species *languida* Grav., and *cognata* Mäkl., are unknown to me at present.

Eucharina n. gen.

This genus, though having a type of pronotal sculpture not unusual in *Baryodma*, differs profoundly in the very coarsely spinose anterior and middle tibiae, the former, especially, being much shorter, more dilated and somewhat arcuate, in its more abbreviated mesosternal and longer, more narrowly angulate metasternal process and very small antennae, with unusual relative development of the second joint. It also differs in its extremely coarse sculpture and in having the first four tergites impressed at base, gradually less strongly, instead of three as in *Baryodma*. The hind tarsi are longer than in that genus, about equal in length to the tibiae, the latter being normally and very sparsely setose and wholly devoid of the very coarse spinules of the other two pairs. The species are only moderately numerous and are confined wholly to the sea-beaches of the Pacific coast from Alaska to Lower California. The five indicated by material before me may be distinguished among themselves as follows:—

Elytra at the sides distinctly longer than the sides of the prothorax; elytral sculpture denser.. 2

Elytra at the sides not longer than the sides of the prothorax; species southern in range; pubescence coarse but sparse and inconspicuous. 4

2 — Form very stout, parallel, the prothorax distinctly transverse. Body deep black throughout, the legs and antennae piceous, polished; head one-half to three-fifths as wide as the prothorax, with a few very coarse, unevenly and remotely scattered punctures, the antennae only about a third longer than the head, gradually and moderately incrassate to the tip, the subapical joints transverse, the eleventh barely as long as the two preceding combined, conoidal, the second joint as long as the next two together; prothorax large, one-half wider than long, the sides distinctly converging from base to apex and only moderately arcuate; sulci deep and strongly, irregularly punctured as usual, the surface elsewhere having very few coarse punctures, aggregated especially toward the sides near the middle, with a few at lateral fourth near the base and also minutely, rather closely punctulate throughout; elytra at the sides much longer than the sides of the prothorax, the suture three-fourths as long as the median line, the punctures very coarsely rugose

and close-set, the upper part of the flanks broadly impunctate except at the middle; abdomen subequal in width to the elytra, parallel, somewhat finely and closely punctured, more coarsely in the impressions, a rather wide median line on segments two to five impunctate except at base; vestiture throughout coarse but sparse and not very conspicuous. Length 5.0 mm.; width 1.35 mm. California (Monterey Bay).

tibialis n. sp.

Form only moderately stout, parallel, the prothorax but slightly wider than long; integuments shining, the pronotum with minute and indistinct punctulation as usual.. 3

3 — Body black, the legs and antennae dark piceo-rufous, the elytra very faintly picescent; head rather smaller than in the preceding, barely half as wide as the prothorax, having similar very coarse punctures aggregated in a transverse, medially interrupted line near the base, with one or two at each side of the middle anteriorly, the antennae nearly similar; prothorax barely a fourth wider than long, the sides distinctly converging from base to apex but only very feebly arcuate, the punctures coarse and closely aggregated in the deep narrow sulci, the surface generally also having a sparsely placed series near the side margins, two or three in the middle at lateral fifth and a cluster of three or four at lateral fourth near the base; elytra at the sides only slightly, though distinctly, longer than the sides of the prothorax, the suture three-fourths as long as the median line, the punctures very coarse and close-set, rugose as usual, the upper part of the flanks with a small impunctate spot posteriorly; abdomen punctured nearly as in *tibialis*, the median smooth line generally less wide and frequently feebly defined; pubescence throughout coarse but sparse, rather pale but not very conspicuous. Length 3.0-4.6 mm.; width 0.8-1.0 mm. California (San Francisco) to Alaska. [=*Aleochara sulc.*, Mann.].

sulcicollis Mann.

Body deep black throughout, the elytra not paler, the legs rufo-piceous; head nearly as in *sulcicollis*, barely half as wide as the prothorax, the latter more rounded at the sides and even less transverse, about a fifth wider than long, the sides only slightly converging from base to apex and conspicuously arcuate, the punctures similar but more numerous and more confused toward the sides; elytra well developed, barely a third wider than long, the sides distinctly longer than the sides of the prothorax, the suture fully four-fifths as long as the median line, the punctures coarse, very dense, rugose, the upper part of the flanks impunctate in apical half; abdomen not quite as wide as the elytra, parallel, rather finely but strongly and very closely punctured, nearly as in the preceding species but more closely and with a very narrow, abruptly defined median impunctate line; pubescence very coarse, unusually long, moderately close, fulvous and conspicuous. Length 4.0–4.4mm.; width 0.95 mm. Queen Charlotte Island (Massett.),— J. H. Keen.

rugosa n. sp.

4 — Moderately stout, convex, shining, deep black, the elytra not paler, the legs and antennae pale brownish-red; head well developed, fully as long as wide, rather more than half as wide as the prothorax, the latter, as well as the head, punctured nearly as in *sulcicollis* but with the very

minute punctulation finer and sparser; antennae slender, only very slightly and gradually incrassate distally, barely one-half longer than the head, the second joint as long as the next two together, the tenth three-fourths wider than long, the eleventh as long as the preceding two combined, very obtusely pyriform, truncate at tip; prothorax unusually elongate, only just visibly wider than long, fully as wide as the elytra, the sides moderately converging from base to apex and feebly arcuate; basal angles broadly rounded as usual, the median lobe of the base strongly rounded; elytra short, the sides much shorter than the sides of the prothorax, the suture two-thirds as long as the median line, the punctures very coarse and asperate but much less close-set than in *sulcicollis*, the flanks impunctate, narrowly at base, very broadly and almost to the lower edge behind, with a few punctures just behind the humeri; discal punctures externally tending to form oblique series; abdomen slightly narrower than the elytra, parallel, finely, rather closely punctate, somewhat broadly impunctate along the middle; hind tarsi fully as long as the tibiae, the basal joint almost as long as the next three combined. Length 4.5 mm.; width 1.05 mm. California (San Diego).
debilicornis n. sp.

Moderately slender and much smaller, convex, parallel, polished, black, the elytra dark piceo-rufous throughout, the legs and antennae pale brownish red; head relatively large, three-fifths as wide as the prothorax or more, with a few large scattered punctures, the antennae nearly as in the preceding but somewhat more rapidly incrassate distally, the second joint scarcely as long as the next two combined, the tenth twice as wide as long, the eleventh more pointed; prothorax fully as wide as the elytra, scarcely a fifth wider than long, the sides only slightly converging from base to apex and distinctly arcuate, punctured nearly as in the other species, except that the punctures near the base, just outside of the sulci, tend to form a short transverse series, the minute punctulation very fine, sparse and indistinct; elytra rather short, moderately transverse, the sides equal in length to those of the prothorax, the suture fully two-thirds as long as the median line, the punctures very coarse and asperate but less close-set than in *sulcicollis* and tending to form oblique series throughout, the upper part of the flanks impunctate except before the middle, very broadly so behind; hind tarsi even somewhat longer than the tibiae but with the basal joint only as long as the next two combined. Length 2.7–2.9 mm.; width 0.65 mm. California (San Diego)..................................**cylindrella** n. sp.

The tendency of the coarse elytral punctures to range themselves into oblique series in *cylindrella* and partially so in *debilicornis*, is a rather singular character; this tendency is not so obvious in the first three species of the table, and, where observable at all, the series are less oblique; the large impunctate areas at the sides of the elytra are also a distinguishing feature as in many Xantholinids.

Maseochara Shp.

At this point we arrive at a series of genera, sharply distinguished from those which precede by having the hypomera feebly inflexed, in such manner as to be visible in part from a lateral point of view in a strictly horizontal plane. There is nearly as much divergence in general structure among the various genera of this series as in the preceding section of the subtribe, but it may be noted that the mesosternal process is shorter as a rule and there are numerous instances where the tip of this process fails to attain the metasternum, sometimes by a long distance, — a character never observable in that group of genera. The genus *Maseochara* is an exception, however, in this respect, as well as in the very widely separated coxae, the mesosternal process attaining or even slightly overlapping the broad apex of the metasternum. The species are generally of large size, comprising in fact the largest of the subtribe and have remarkably opaque integuments, due to a minute recticuliform granulation, the true punctures of the head and pronotum, where this fine sculpture is especially evident, being feeble, sparse and ill defined as a rule. The pubescence is coarse, sparse, generally moderate in length and more or less inconspicuous. The sixth tergite of the male is armed throughout the width of its truncate apex with six long porrect and spiculiform teeth, the three on each side being somewhat curved toward the axial line. These appendages are homologous with the much finer and closer dentiform pectination characterizing the first division of *Aleochara*, as heretofore noted, but are more plastic or variable and can seldom be employed in the definition of species. The seven species in my cabinet may be described as follows:—

Large species, never materially less than 7 mm. in length..................2
Small species never notably exceeding 5 mm. in length..................6
2 — Elytra black..................3
Elytra dull rufous in color; prothorax transverse..................5
3 — Prothorax almost as long as wide. Body black throughout, the legs and tarsi throughout and the antennae, gradually toward base, piceous-black; head and pronotum opaque, the former rather distinctly, the

latter extremely finely, rather closely but indistinctly punctate throughout, the elytra more shining, finely but distinctly, subasperately, evenly and closely punctured, the abdomen strongly shining, finely, somewhat closely punctured, becoming gradually very sparsely so posteriorly; head orbicular, three-fourths as wide as the prothorax, the antennae stout, only feebly incrassate distally, the second joint distinctly shorter than the third, the tenth about a third wider than long, the eleventh rather narrower than the tenth, somewhat shorter than the two preceding combined and feebly pyriform; prothorax very slightly wider than long, the apex but little narrower than the base, the sides evenly and rather strongly arcuate, the basal angles obtuse but distinct; elytra very short and transverse, the sides very much shorter than the sides of the prothorax, the suture barely three-fifths as long as the median line; abdomen not quite as wide as the elytra, parallel, arcuately narrowed toward tip, the latter not at all paler in color; hind tarsi shorter than the tibiae, the basal joint less than one-half longer than the second, three-fourths as long as the fifth, two to four equal in length. *Male* with the ventral spines short and slender, the two sets of three separated by an unusually wide interval, this being equal to the width of either set. Length 7.0 mm.; width 1.7 mm. Arizona (Benson).

decipiens n. sp.

Prothorax transverse, strongly and continuously rounded at the sides and base, the angles subobsolete, black, the abdomen rufous at tip, the two sets of male abdominal spinules separated by a much narrower interval than in the preceding..4

4 — Mesosternal process very broad, its apex broadly, almost evenly arcuate and received in a broadly arcuate impression in the usually still broader tip of the metasternum. Body very stout; elytra, legs and antennae deep black; head rounded, three-fifths as wide as the prothorax, feebly, sparsely punctate and opaque; antennae as long as the two together, very stout, the second joint much shorter than the third, the tenth fully one-half wider than long; prothorax two-fifths wider than long, opaque, with very fine and rather sparse, indistinct punctures and short, suberect, blackish hairs; elytra well developed, at the sides as long as the sides of the prothorax, the suture three-fourths as long as the median line, the punctures very fine, only moderately close-set, shallow and indistinct; abdomen at base as wide as the elytra, the segments finely punctured but only in apical half, rather closely on the basal, sparsely on the apical, tergites; hind tarsi stout, scarcely two-thirds as long as the tibiae, the basal joint about a third longer than the second and but little more than half as long as the fifth. Length 9.0-11.0 mm.; width 2.3-2.8 mm. California (near Los Angeles).

valida Lec.

Mesosternal process less broad, with its sides more rapidly converging, as a rule, the tip narrower and less rounded though variably so. Body less stout, the antennae and legs slightly piceous; head orbicular, two-thirds as wide as the prothorax, feebly, sparsely punctate, impunctate toward the middle anteriorly as in *valida*, opaque; antennae less stout, barely as long as the head and prothorax, the second joint much shorter than the third, the tenth distinctly less than one-half wider than long, the eleventh more elongate than in the preceding species; prothorax opaque, less transverse, one-third wider than long, the punctures fine, feeble and rather more close-set than in *valida;* elytra nearly similar in form but more shining, the punctures fine but stronger and very distinct, moderately close-set; sides scarcely as long as those of the prothorax, the suture two-thirds as long as the median line; abdomen polished, as wide as the elytra, finely, sparsely punctured in apical half of the tergites; hind tarsi about three-fourths as long as the tibiae, the basal joint about one-half longer than the second and three-fourths as long as the fifth. Length 7.8–9.5 mm.; width 1.75–2.2 mm. California (Los Angeles and San Diego)........................**californica** Csy.

5 — Body large and very stout, subparallel, black, the elytra pale but dull rufous, blackish at the basal margin; abdomen piceo-rufous at tip, the legs dark piceous, the antennae piceous-black throughout; head opaque, strongly but rather sparsely punctured except along the middle as usual, two-thirds as wide as the prothorax; antennae very stout, rather strongly incrassate distally, not quite as long as the head and prothorax, the second joint much shorter than the third, the tenth fully two-thirds wider than long, the eleventh comparatively small, pyriform; prothorax opaque, finely but strongly, moderately closely punctured, two-fifths wider than long; elytra less opaque, distinctly broader than the prothorax, the sides as long as the sides of the latter, the suture two-thirds as long as the median line, the punctures fine but distinct, moderately close-set; abdomen nearly as wide as the elytra, parallel, finely, rather sparsely punctured in about apical half of all the tergites; mesosternal process very wide, arcuate at tip, nearly as in *valida;* hind tarsi two-thirds as long as the tibiae, the basal joint fully one-half longer than the second and four-fifths as long as the fifth. Length 8.0–11.0 mm.; width 1.9–2.8 mm. Arizona................**ponderosa** n. sp.

Body smaller and more slender; coloration as in *ponderosa* but with the tip of the abdomen bright and pale rufous; head and pronotum opaque, finely but very distinctly punctate, the former well developed, orbicular as usual, nearly three-fourths as wide as the prothorax, the antennae nearly as in *ponderosa*, the prothorax nearly similar but with the punctures more close-set; elytra alutaceous, black toward the scutellum, at the sides not quite as long as the sides of the prothorax, the suture barely two-thirds as long as the median line, the punctures fine, rather feeble and moderately sparse; abdomen punctured nearly as in *ponderosa;* mesosternal process less broad and more truncate at tip, the apex of the metasternal process much broader than the tip of the mesosternal and broadly emarginate in circular arc as usual; hind tarsi nearly as in *ponderosa.* Length 7.0 mm.; width 1.65 mm. Arizona (Benson), — G. W. Dunn.......................................**ruficauda** n. sp.

6 — Body somewhat slender, black, the elytra obscure rufous, generally blackish at the sides and base; legs rather pale, the antennae darker, brownish-rufous; integuments opaque, the elytra less so and the abdomen shining; vestiture longer and more abundant than in any of the preceding species; head orbicular, much narrowed at base, the basal parts not more shining except toward the sides; antennae about as long as the head and prothorax, rather strongly incrassate distally but

unusually slender toward base, the second and third joints equal; punctures fine and obscure; prothorax equally finely but rather closely punctate, scarcely one-half wider than the head, about a fourth wider than long, the sides subparallel, evenly and distinctly arcuate, the base arcuate, the angles very obtuse but distinct; elytra obviously wider than the prothorax, the sides distinctly longer than those of the latter, the suture four-fifths as long as the median line, the punctures very fine but close-set; abdomen about as wide as the elytra, finely and moderately closely punctured almost to the bases of the tergites; mesosternal process narrower than in *valida* and allies, truncate or feebly sinuate at tip, abutting against the truncate and unemarginate apex of the metasternum; hind tarsi fully three-fourths as long as the tibiae, the basal joint one-half longer than the second. Length 3.8–5.0 mm.; width 0.78–1.2 mm. Arizona (Benson) and California.......... **puberula** Csy.

Body just visibly stouter and less parallel, black, the elytra and antennae dark piceous, the latter toward base and the legs paler, testaceous; pubescence rather shorter, finer and less conspicuous; head not orbicular and much narrower, only slightly narrowed from the eyes to the base, with the sides scarcely at all arcuate, the surface opaque except broadly along the base, where it becomes abruptly shining and with dense asperate punctures except at the sides; antennae nearly similar, strongly incrassate distally but with the second joint not quite as long as the third, although subequal; prothorax rather small, about a fifth wider than long, the sides parallel, evenly and more strongly arcuate, the angles obtuse but distinct, the punctures very fine, rather close-set, but indistinct, the surface opaque; elytra less opaque, finely but strongly, closely punctured, much wider than the prothorax, the sides equal in length to the sides of the latter, the suture four-fifths as long as the median line; abdomen polished, broader than in *puberula*, as wide as the elytra, very finely, rather sparsely punctured almost throughout, the punctures becoming close-set toward base; hind tarsi fully three-fourths as long as the tibiae, the basal joint a little less than one-half longer than the second and about two-thirds as long as the fifth. Length 3.8 mm.; width 0.92 mm. California (Arrowhead) .... **basalis** n. sp.

The species above described range themselves into three rather well defined groups, the first and last of which are closely allied, though separated in the table by the second for convenience in identification. The first group consists of *decipiens* alone, having moderately broad meso- and metasternal processes, coming together on a straight transverse line, heavy antennae like those of the second group and having a similarly short second joint, distinct basal angles of the prothorax and abdomen punctured almost throughout. The second group includes the species from *valida* to *rufi-*

cauda, they being of stouter build, large size as a rule, with very broad meso- and metasternal processes, the former generally rounded at tip and the latter broadly and circularly emarginate and frequently wider than the mesosternal, very stout antennae, which however are not very strongly incrassate, and with the second joint much shorter than the third, broadly rounded sides and base of the prothorax, with subobsolete basal angles and with the abdomen only punctured in apical half of the dorsal plates. The third consists of much smaller species, resembling the first group in the intermesocoxal parts, abdominal punctures and parallel prothorax with distinct basal angles, but the antennae are much more slender basally and more strongly incrassate distally, with the second and third joints equal or nearly so. *Semivelutina* Solsky, does not occur within our borders but belongs to the fauna of the warmer parts of Mexico, the head, prothorax and elytra are all red. *Ponderosa* of the table was formerly labeled *valida* in some cabinets but is not the same as the species of LeConte, which has black elytra. I formerly regarded *californica* as identical with *valida*, but more ample series of specimens show that it is a smaller and notably less stout species. *Decipiens* is closely allied to *opacella* Shp., but is probably not the same, differing in its smaller size and stouter antennae. The type specimen of *basalis* has a remarkable deformity on the surface of the pronotum, consisting of a very large, strongly and obliquely elevated protuberance in the form of a volcanic cone, having an elliptical crater at the summit.

If this genus is ever subdivided, the name *Maseochara* may be applied to species of the *opacella* type and *Tithanis* to those of the *valida* type. Mr. Fauvel has recently assigned some East Indian species to *Maseochara*, but in all probability they are not really congeneric.

Emplenota Csy.

As the name *Polystoma*, employed by Stephens for this genus, is a preoccupied name, and, since the word "*Poli-*

stoma,'' suggested by me some time ago (Annals N. Y. Acad. Sci., VII, p. 289) seems to be a mere printer's error, it becomes necessary to use the name above given, which was published in 1885 (Cont. Descr. and Syst. Col., II, p. 123). In this genus the body becomes more depressed in form than in any of our other types of Aleocharae except *Pinalochara*, and the integuments are duller because of minute reticulation and granulation, than in any except *Maseochara*, and, even there, the abdomen is polished and not minutely reticulate as it is here. The pubescence also becomes rather conspicuous, pale, close and erect though never very long. In *Emplenota* and all others of the following genera of this subtribe, the prothorax differs greatly from that of *Rheochara* in being relatively smaller as a rule and parallel or nearly so at the sides. The mesosternal process is not materially wider than in *Rheochara* but is more abbreviated, extending usually to about apical third of the acetabula, and is subacute to narrowly truncate at tip; the metasternal projection is correspondingly longer, though separated from the tip of the mesosternal by the same depressed discontinuity of surface, which is only slightly variable in longitudinal extent within the limits of the genus. The species, like those of *Eucharina*, appear to be confined to the ocean beaches, those of our fauna being characterized as follows:—

Species of the Atlantic coast. Body unusually slender, finely granulato-reticulate and dull, the abdomen feebly reticulate and polished, the pubescence stiff, fulvous and distinct, black, the elytra more or less rufo-piceous, the legs and antennae blackish, the tarsi slightly paler; head nearly four-fifths as wide as the prothorax, parallel, slightly inflated and arcuate at the sides behind the moderate eyes, rather abruptly narrowed at base, strongly, somewhat closely punctured, impunctate along the median line, the antennae shorter and more slender than usual, rather feebly incrassate distally, about one-half longer than the head; prothorax small, scarcely a fifth wider than long, the sides arcuate, rather more strongly convergent and straighter toward base than apex, the latter fully as wide as the rounded base; angles very obtuse, the punctures rather impressed, coarse and distinct, moderately close; surface flattened toward the middle; elytra well developed, only slightly transverse, the sides very much longer than the sides of the prothorax, the suture as long as the median line, the disk much wider; punctures moderately fine, rather strongly impressed and close-set;

abdomen narrower than the elytra, parallel and straight at the sides throughout, finely, sparsely punctured, the basal parts of the tergites impunctate; mesosternal process acute, with a longer sloping posterior margin than in any other species, the apparent distance between the two apices being therefore greater. Length 3.0-4.0 mm.; width 0.75–0.8 mm. New York to Virginia (Norfolk)......... **maritima** Csy.

Species of the Pacific Coast...2

2 — Antennae stout and strongly incrassate, the ante-apical joints strongly obtrapezoidal, short and very strongly transverse, the second and third joints moderately elongate, subequal in length, the former somewhat the shorter; basal joint of the hind tarsi as long as the third and fourth combined. Body stout, parallel, opaque, the elytra less so, the abdomen shining, black, the entire elytra dark rufo-piceous; legs red-brown, the antennae infuscate; vestiture short and inconspicuous, rather sparse; head large, subquadrate, wider than long, three-fourths as wide as the prothorax; finely, somewhat sparsely punctate, the median line impunctate as usual; antennae slightly shorter than the head and prothorax, the latter large, more transverse, a third wider than long, parallel and evenly, rather strongly rounded at the sides, the base almost continuously and strongly arcuate, the angles very obtuse and barely visible; punctures fine, not very distinct, well separated and evenly distributed throughout; elytra distinctly wider and somewhat longer than the prothorax, the sides evidently longer than those of the latter, the suture scarcely as long as the median line, the punctures fine, moderately close-set and rather distinct; abdomen nearly as wide as the elytra, parallel, finely, sparsely punctate, the punctures very remote toward apex, the impressions impunctate as usual; mesosternal process acute, the space between the two apices unusually deeply excavated. Length 3.5 mm.; width 1.0 mm. California (Sta. Barbara and La Jolla). **pacifica** Csy.

Antennae less strongly incrassate distally, the outer joints less narrowed from apex to base and less strongly transverse, the second joint always longer than the third; basal joint of the hind tarsi still shorter, but little longer than the second.......................................3

3 — Second antennal joint only very slightly longer than the third. Form only moderately stout, parallel, dull in lustre, the abdomen polished, the vestiture moderate in length and abundance though distinct, black, the elytra very dull rufo-piceous, black at the sides, the legs pale red-brown, the antennae nearly black; head relatively large, four-fifths as wide as the prothorax, finely, strongly punctured except along the middle, the antennae about as long as the head and prothorax, the latter a fifth wider than long, parallel, with evenly and moderately arcuate sides and rounded base, the punctures fine but distinct and rather close, the surface somewhat flattened toward the middle, with two feebly tumescent smoother spots at the basal margin and separated by half the width; elytra but slightly transverse, much wider and evidently longer than the prothorax, the suture as long as the median line, the punctures rather fine but strong, somewhat close-set; abdomen narrower than the elytra, parallel throughout, the punctures fine and sparse, wanting at the bases of the tergites; mesosternal process acuminate, the

tip extremely narrowly rounded. Length 3.5-4.0 mm.; width 0.8-0.85 mm. California (San Diego)........................**arenaria** Csy.

Second antennal joint much longer than the third; elytra bright testaceous except broadly along the sides and base; vestiture fulvous, rather abundant and conspicuous..4

4 — Form very broad, parallel, dull as usual, the abdomen shining, black, the legs piceous, the antennae black, scarcely paler toward base; head relatively smaller than in *arenaria*, somewhat wider than long, two-thirds as wide as the prothorax, finely, rather feebly and not closely punctate, with the parallel median line impunctate; antennae nearly as long as the head and prothorax, stout throughout, though only moderately incrassate distally; prothorax about a fourth wider than long, parallel and rounded at the sides, the base broadly arcuate, the punctures fine and rather close, the surface subveven, convex, with the two widely separated basal tumidities feeble; elytra large, distinctly longer and wider than the prothorax, slightly transverse, the suture as long as the median line, the surface flat, finely but distinctly, unusually closely punctured; abdomen broad, nearly as wide as the elytra, parallel, punctured finely and sparsely except at the bases of the tergites as usual; mesosternal process narrow, short, becoming parallel toward tip, the latter arcuato-truncate. Length 3.6 mm.; width 1.1 mm. California (Redondo),— H. C. Fall ....**quadrifer** n. sp.

Form narrow, parallel, depressed as usual, dull, the abdomen moderately shining, black, the legs piceous, the antennae black, slightly picescent toward base; head nearly as long as wide, three-fourths as wide as the prothorax, finely, feebly punctured in the usual way, the antennae moderately stout and incrassate distally; prothorax smaller, parallel, about a fifth wider than long, the sides and base rounded, the punctures feebly impressed, somewhat close-set, the basal tumid spots distinct; elytra very much wider and longer than the prothorax, the suture slightly longer than the median line, the punctures rather fine but somewhat less close-set than in *quadrifer;* abdomen evidently narrower than the elytra, parallel, finely, rather sparsely punctured as usual; mesosternal process short, still somewhat broader than in *quadrifer* and more gradually narrowed to the arcuato-truncate apex. Length 3.6 mm.; width 0.78 mm. California (Alameda)...............**trilimbata** n. sp.

The European *algarum*, of Fauvel, belongs to this genus, although the mesosternal process is evidently longer than in any of the American species and still somewhat wider than in *trilimbata*, gradually becoming parallel toward the abruptly arcuato-truncate apex near apical fourth of the acetabula; the second antennal joint is longer than the third and the basal joint of the hind tarsi very short as usual, and there is the usual depressed discontinuity between the tips of the meso- and metasternal processes. The species described by

Kraatz as *Polystoma grisea* will, however, have to be placed in another genus as previously defined, the body being more convex, the basal joint of the hind tarsi long and the mesosternal process much longer, attaining the tip of the metasternum and closing the gap so characteristic of *Rheochara*, *Emplenota* and many other genera of this section of the Aleocharae. It is probable that other species of this genus will be found on our Florida and Gulf coasts, but I have seen none as yet.

Echochara n. gen.

This is an isolated type, necessitating a special generic title, as suggested above, for a species originally described by the writer under the provisional name *Rheochara lucifuga* (Annals N. Y. Acad. Sci., VII, p. 288). The middle coxae are subcontiguous, the very finely acuminate mesosternal process being more or less bilaterally compressed and it differs from *Rheochara* in addition, by the long, acutely angulate metasternal process projecting anteriorly between the coxae. The tarsi are of nearly the same type as those of *Rheobioma* and *Rheocharella*, but are stouter, more decidedly shorter than the tibiae, with the basal joint somewhat longer than the fifth, though only intermediate in length between the next two and three together. The abdomen differs greatly from either in having the first four tergites impressed at base, successively less strongly, the fourth feebly so, and even the fifth is noticeably and broadly concave, almost as strongly so as the fourth; these basal impressions differ from those of *Maseochara* and *Emplenota* in being strongly punctured. The antennae are of the usual type, with the fourth joint smaller than the fifth, and, as is sometimes the case, the outer sides of the penultimate joints are a trifle longer than the inner, causing the rectilinear apices to be feebly oblique. The eyes are smaller than usual, though still well developed, and are at a long distance from the base. The punctures of the head and pronotum are extremely minute and but little larger than the base of the hairs borne by them; each is surrounded by a minute incised ring; those of the elytra are normal and transversely crescentiform. The integuments are finely, very obsoletely reticulate, except the abdomen, which is wholly devoid of minute ground sculpture. The type may be characterized as follows: —

Form elongate, slender and parallel, normally convex, subalutaceous, the abdomen shining, pale ferruginous throughout, the legs and antennae concolorous; head and abdominal dorsal plates piceous, pale toward apex, the sixth wholly pale; pubescence rather abundant, decumbent and distinct; head somewhat elongate, three-fifths as wide as the prothorax, widest near the base, the sides arcuate, the punctures sparse and indistinct, the antennae stout, somewhat longer than the head and prothorax, strongly incrassate distally, the outer joints transverse, the second and third elongate and equal; prothorax scarcely more than a fourth wider than long, subparallel, the sides evenly, rather strongly and the base feebly, arcuate, the apex narrower than the base, the basal angles obtuse and rounded, the punctures somewhat sparse and very indistinct; elytra scarcely visibly wider and somewhat shorter than the prothorax, the outer side equal in length to the side of the latter, the suture scarcely more than two-thirds as long as the median line, the punctures rather strong, asperulate and close-set; abdomen long, subparallel, slightly narrower than the elytra, finely punctulate, very sparsely toward tip, the punctures slightly coarser, rather close-set and distinct in the basal impressions; legs rather long, finely, closely setose. Length 4.5 mm.; width 0.8 mm. Kentucky (Lexington). [=*Rheochara luc.* Csy.]..........**lucifuga** Csy.

There are some inaccuracies in the original description which are here corrected; the abdomen, for example, has no subapical cloud, though the apical pale margin of the fourth tergite is somewhat narrower than that of the basal segments, and the punctures of the basal depressions are coarser than the others. The mesosternal process does not more than just attain the acute apex of the metasternum, but on a lower level — in the natural position of the body. This species is said to inhabit caves, but probably only incidentally.

Pinalochara n. gen.

In many structural features and in appearance this genus resembles both *Maseochara* and *Emplenota*, having a somewhat similar reticulate sculpture, the depressed form and short basal joint of the hind tarsi characterizing *Emplenota* and the feebly inflexed hypomera of *Maseochara*. It is founded upon a single species which may be briefly described as follows: —

Body parallel, depressed, rather shining, black, the elytra bright red; legs pale, the antennae blackish, gradually testaceous basally; integuments coarsely and not strongly micro-reticulate, the elytra very feebly so, the abdomen finely and obsoletely transversely strigilato-reticulate; punctures fine and sparse but distinct, rather larger, more close-set and somewhat feebly impressed on the elytra, fine and somewhat sparse on the abdomen, except the basal region of all the tergites which is impunctate; pubescence short and inconspicuous but with many longer erect and bristling setae along the sides; head rather longer than wide, the sides behind the eyes evenly and strongly arcuate to the neck, slightly widest behind the eyes; antennae attaining the middle of the elytra, gradually, strongly incrassate distally, the subapical joints distinctly transverse, the eleventh obtusely pointed and almost as long as the preceding three combined; prothorax only very slightly wider than the head and about a fourth wider than long, the sides parallel and feebly arcuate; base broadly rounded; surface extremely finely and feebly impressed along the median line from apex nearly to the base; elytra transverse, rather distinctly wider than the prothorax but not quite as long, the suture four-fifths as long as the median line, the humeri scarcely exposed, the basal concavity infumate; abdomen parallel and straight at the sides, slightly narrower than the elytra. Length 3.5 mm.; width 0.81 mm. Arizona (Santa Rita Mts.),—H. F. Wickham. **wickhami** n. sp.

The sixth tergite is truncate at tip in the unique type, with the edge even, and the sex of this specimen is not clearly determinable. The infra-lateral carina of the head in this genus is feebler than usual, becoming almost obsolete anteriorly.

Rheochara Rey.

This genus is very isolated, differing greatly from any other with feebly inflexed hypomera, in the dense sculpture of the abdomen and in the apically narrowed prothorax. The body in *Rheochara* is small in size, normally convex, with transverse subconical prothorax, very broad front between the antennae and moderately slender hind tarsi, having the basal joint as long as the next two combined. The punctures of the head and pronotum are evenly distributed, small but strongly annular in form, those of the elytra more impressed, coarser and transversely subasperate, while on the abdomen, they are small but very close-set and rugose throughout, not differing materially in the concave depressions of the three basal tergites. We have as yet but a single species which may be described as follows:—

Moderately stout, convex, alutaceous, piceous-black, the elytra rufous, becoming nubilously black about the scutellum and obliquely at each side. more broadly toward apex, each abdominal segment rufescent toward tip above and beneath; antennae fuscous, the basal parts and legs throughout pale testaceous; pubescence fine, subdecumbent, dense and rather conspicuous; head three-fifths as wide as the prothorax, finely, rather closely, the latter still more finely and very closely punctate; eyes unusually prominent; antennae as long as the head and prothorax, the basal joints slender, the second and third equal, fourth to the tip much stouter but increasing only very slightly outwardly, compact, the tenth nearly twice as wide as long, the eleventh well developed, longer than the two preceding combined and fully as wide, ogivally pointed; prothorax strongly transverse, compactly joined to the elytra, the base exactly as wide as the base of the latter but slightly narrower than the apical parts, the sides strongly converging from base to apex and evenly, moderately arcuate, the surface very evenly convex; elytra well developed, fully one-half wider than long, the sides much longer than those of the prothorax, the suture fully as long as the median line, the punctures fine and dense; abdomen distinctly narrower than the elytra, parallel, arcuately narrowing posteriorly, finely, very closely and evenly punctured throughout; mesosternal process extending fully to apical fifth of the coxal cavities, the metasternal very short, broadly parabolic, between the posterior ends of the cavities some five times as wide as long; basal joint of the hind tarsi as long as the next two combined. Length 3.0 mm.; width 1.0 mm. Pennsylvania (Westmoreland Co.), — P. J. Schmitt.....**nebulosa** n. sp.

Some time ago one of my European correspondents sent me a specimen under the name *Aleochara lugubris*, which is placed in the catalogues as a synonym of *moerens* Gyll., under the subgeneric name *Baryodma*. On examining this specimen I found the hypomera to be feebly inflexed and in considerable part visible from the sides, and therefore conclude that it is not the species stated, but — the antennae being rather stout and compact — a representative of *Rheochara* and assume that it represents the unique type of that genus, named *spadicea* by Erichson. The present species, described above from the mountains of Pennsylvania, is exactly congeneric, but is stouter, less parallel and with finer, less densely crowded punctuation.

In the European species the abdomen is not narrowed toward tip but remains perfectly parallel from base to the very broad tip of the fifth tergite, and the mesosternal process is not only a little narrower but also somewhat shorter than in the American species, with the metasternal process somewhat longer and only very narrowly rounded, the cavity between the two apices being about equal in length in the two species.

Rheobioma n. gen.

This genus is allied to *Rheochara* in having the three basal tergites subequally impressed at base, though otherwise there is but little community of facies. The prothorax, instead of being very transverse and strongly narrowed from base to apex, closely applied to the elytra and densely sculptured, is here but feebly narrowed anteriorly, rather loosely articulated and finely and sparsely punctulate, but the abdomen, especially, differs in its fine remote punctulation and the antennae are much more elongate. The genus is wholly isolated in some features of the under surface, the tip of the long slender and parallel mesosternal process being separated from the metasternum by a much longer longitudinal discontinuity than in any other, and the metasternum does not enter at all between the acetabula, being merely broadly and feebly arcuate. The mesosternal carina, which also seems to be a peculiar feature, extends from the dilated anterior margin to a transverse line through anterior third or fourth of the acetabula but is not similar to the carina of *Baryodma* and allies, being irregular, broadly flattened and very feebly elevated. Another singular feature is the elongate fourth antennal joint, which is even somewhat longer than the fifth and distinctly longer than wide. The hind tarsi are extremely slender and evenly filiform throughout, though not quite as long as the tibiae, with the basal joint almost as long as the next three combined and somewhat longer than the fifth. The type may be described as follows:—

Moderately stout, subfusiform, convex, shining, pale piceous, the elytra throughout rather more rufous, the abdomen blackish; antennae some-

what infuscate, the basal joint and the legs throughout pale brownish-testaceous; pubescence rather long, abundant, fulvous and distinct; integuments finely, very obsoletely reticulate, the abdomen excessively minutely strigilate in transverse wavy lines but strongly shining; head three-fifths as wide as the prothorax, arcuately narrowed behind the moderately large but not prominent eyes, the punctures extremely minute, sparse and indistinct; antennae extending at least to basal third of the elytra, slender basally, gradually somewhat strongly incrassate distally, with the joints moderately transverse, closely joined and narrowed but little from their apices to their bases, the second and third much elongated and equal; prothorax not quite a third wider than long, convex, the sides very slightly though obviously converging from base to apex and evenly, moderately arcuate, the base broadly arcuate, the disk apparently somewhat flattened toward the middle posteriorly; punctures extremely minute, rather sparse and scarcely observable; elytra large, wider and much longer than the prothorax, the suture about a third longer than the median line, the punctures very fine and feeble, close-set; abdomen much narrower than the elytra, parallel toward base, gradually and arcuately narrowing in apical half, extremely minutely, feebly and remotely punctulate, the depressions almost wholly impunctate. Length 3.0 mm.; width 0.88 mm. California (Tehachepi Pass), — H. F. Wickham............................**disjuncta** n. sp.

The extremely minute close-set strigilation of the abdomen is a feature wholly wanting in *Rheochara fenyesi* Bernh., and in *Rheochara nebulosa*, there is, besides the close strong punctuation, only a feeble coarse reticulation visible toward the tip of the abdomen. The abdomen is also narrower, in proportion to the width of the elytra, than in any other genus of the subtribe known to me. This is in fact a widely isolated type.

Rheocharella n. gen.

In this genus the general habitus is nearly as in *Rheobioma* and the hind tarsi are similarly extremely slender and filiform though shorter than the tibiae, with the basal joint much longer than the last and as long as the next three combined, but there are so many points of divergence that no other course seems appropriate but the suggestion of generic separation. The very slender and acutely rounded process of the mesosternum extends to the rather strongly produced and narrowly rounded, though much broader metasternal projection, without trace of the long discontinuity characterizing *Rheo-*

bioma, and, besides this, the two differ radically in the form of the abdomen, there being only two basally impressed tergites here, instead of the three of that genus and *Rheochara*. The general surface of the abdomen is perfectly smooth and highly polished, without trace of minute ground sculpture of any kind. The single known species may be identified by the following characters:—

Moderately stout, convex, subparallel, strongly shining, piceous-black, the elytra pale rufo-testaceous, clouded with blackish at the sides in the vicinity of the apical angles; antennae blackish, the basal joint and legs throughout pale testaceous; vestiture fine, subdecumbent and somewhat inconspicuous; head nearly as long as wide, about three-fifths as wide as the prothorax, extremely minutely, sparsely punctulate; antennae fully as long as the head and prothorax, gradually and strongly incrassate distally, slender basally, the subapical joints about two-thirds wider than long, the second and third elongate and equal, the fourth normal, much shorter and narrower than the fifth; prothorax about a fifth wider than long, parallel, the sides broadly and evenly arcuate, the base similarly arcuate, the punctures very fine, rather sparse and indistinct; elytra somewhat transverse, evidently though not very greatly wider and longer than the prothorax, the suture equal in length to the median line, the punctures fine but distinct, rather close-set; abdomen at base almost as wide as the elytra, gradually narrowing in apical half, parallel toward base, the punctures very fine but distinct, evenly distributed throughout each tergite though becoming sparser in the two basal impressions, rather close-set toward the abdominal base but becoming excessively sparse toward tip. Length 2.8 mm.; width 0.8 mm. California (Pasadena)...........**fenyesi** Bernh.

I owe a representative of this very interesting species to Dr. A. Fenyes, of Pasadena, in honor of whom it was recently named by Mr. Bernhauer, (D. Ent. Zeit., 1905, p. 249).

A number of European Aleocharae have been noted from time to time as occurring in America, besides *fuscipes* and *nitida* before mentioned; among these are *Xenochara puberula*, which has doubtless been confounded with our *bipartita*, *moerens* Gyll., and *morion* Grav., the last being a very isolated minute and peculiarly sculptured species with very broad mesosternal process. *Graciliformis* Fauv., of the Henshaw list of 1895, is unknown to me; it is probably a manuscript name.

Tribe MYRMEDONIINI.

The genera of this tribe here defined have a certain community of facies which is rather difficult to characterize rigorously, but resulting mainly from the fact that the head and prothorax are always narrower than the elytra, with the former strongly constricted at base and the sculpture of the abdomen more or less sparse, the first two or three tergites being deeply and conspicuously impressed at base. They are the genera that range themselves about *Gnypeta*, *Tachyusa* and *Falagria*. Possibly some European genera placed in proximity to these three genera in the catalogue of Heyden, Reitter and Weise, other than those defined in the accompanying tables, should be included, but it is certain that *Echidnoglossa*, placed next to *Falagria* in that work, should be excluded, as the tarsi are all 5-jointed and *Thinonoma* Thom., and *Brachyusa* Rey, which come after *Gnypeta*, are also to be excluded, they having scarcely any points of habital resemblance. *Ischnopoda* and *Xenusa*, however, seem to be close allies of *Gnypeta* and are included in the following table. These genera form two independent subtribes of the Myrmedoniini as follows:—

Prosternum wholly membraneous under the coxae; neck only moderately narrow...**Tachyusae**
Prosternum corneous under the coxae, either wholly or partially; neck very slender...**Falagriae**

These subtribes both include numerous genera.

Subtribe **Tachyusae.**

In delimiting the genera of this subtribe considerable taxonomic value is attached to the form of the intermediate acetabula, whether sharply outlined throughout by a fine beaded edge — closed, — or having the beaded edge widely interrupted behind, the bottom of the cavity merging gradually through a continuous convex surface into the metasternum — open. Other characters which are held to be of greater or less generic import relate to the degree of separation of the middle coxae and conformation of the intermesocoxal parts. The pronotum, although frequently broadly impressed along the middle, seldom has any very distinct trace of the longitudinal groove distinguishing most of the Falagriae. The genera represented in my cabinet may be briefly described as follows:—

Middle acetabula complete and closed throughout by a fine beaded edge 2
Middle acetabula broadly open behind..................................5
2 — Middle coxae well separated, the mesosternal process obtuse.........3
Middle coxae approximate, the mesosternal process narrower, sometimes very acute, free..4
3 — Body slender; mesosternal process very short, broadly rounded at tip, extending only to anterior third of the acetabula and on exactly the same plane as the obtusely truncate tip of the long metasternal projection, from which it is separated by a very short broad isthmus; prosternum moderate before the coxae, not extending more than half way to the mesosternum, angularly tumid behind, the exposed part separated from the concealed inner edge by a fine beaded margin, the inner part somewhat produced posteriorly but very broadly rounded; head small, orbicular, the antennae long, the neck not quite one-half as wide; eyes rather small, not prominent; prothorax narrow, broadly impressed; elytra depressed, short, prominently elevated along the sides; abdomen broad, subimpunctate, the first three tergites narrowly and subequally impressed at base, the impressions sculptureless; legs and antennae long, the hind tarsi long and slender, filiform, the first joint fully as long as the next two combined. Pacific Coast of America...**Trachyota**
Body stouter, nearly as in *Meronera;* mesosternal process very short and broad, transversely truncate at tip, not extending quite to anterior third of the acetabula and separated from the truncate apex of the long wide metasternal projection by a very short broad isthmus on the same plane as both the apices; middle coxae widely separated; prosternum unusually developed before the coxae, posteriorly and sharply angulate between the latter, the very finely aciculate apex extending to the mesosternum and finely carinate for a short distance from the tip; head well developed, arcuato-truncate at base, the eyes large and prominent; palpi slender, moderate in length, the antennae slender, rather long; neck unusually narrow, less than a third as wide as the head; prothorax wider than long, obtrapezoidal, strongly and almost evenly convex; elytra evenly convex, not angulate at tip externally; abdomen parallel, almost as in *Gnypeta,* the first three tergites rather strongly but narrowly and subequally impressed at base, the fourth and fifth also very feebly impressed near the basal margin; legs and tarsi very slender. Cuba and Central America...................................***Neolara**
Body usually rather stout but variable in form, the mesosternal process narrowly rounded, extending to about the middle of the acetabula, very slightly free and separated from the rounded tip of the metasternal

projection by a short and broad undepressed isthmus, which is however notably longer than in *Trachyota*; prosternum nearly as in that genus but much shorter before the coxae, the head larger and the eyes much more developed; antennae short or long; neck wide, two-thirds to four-fifths as wide as the head; prothorax generally transverse, usually more or less impressed in the middle posteriorly and with a short transverse impression before the scutellum; elytra not prominent along the sides; abdomen generally somewhat narrower than the elytra though always broader than in *Tachyusa*, with the three basal tergites deeply and subequally impressed at base; legs moderate, the hind tarsi short, with the basal joint generally much shorter than the next two combined. America and Europe.......................................**Gnypeta**

Body rather stout, nearly as in *Gnypeta* but clothed throughout, including the legs and tarsi, with extremely fine short pale and subdecumbent hairs, the basal angles of the prothorax not at all rounded; mesosternal process not extending quite to the middle of the coxae, strongly narrowed to the broad and arcuato-truncate tip, which attains, on a slightly different level, the apex of the very elongate broad metasternal projection; prosternum before the coxae short, with an obtusely rounded, short posterior projection; neck three-fourths as wide as the head, the eyes large and somewhat coarsely faceted; antennae very slender with the second joint much longer than the third; abdomen broad with the first three tergites feebly impressed at base; legs long and slender, the hind tarsi filiform, nearly as long as the tibiae, with the basal joint somewhat longer than the next two combined, two to four rapidly decreasing in length, the fifth very short, the claws slender, arcuate. Sonoran fauna...**Teliusa**

4 — Form moderately stout, nearly as in *Gnypeta* throughout; mesosternal process extending to the middle of the acetabula and separated from the acutely rounded apex of the metasternal projection by a very narrow, rather long and distinctly depressed isthmus; prosternum short before the coxae; head moderate, with well developed and rather prominent eyes, long antennae and unusually elongate third joint of the maxillary palpi, the neck broad, fully three-fourths as wide as the head; prothorax, elytra and abdomen as in *Gnypeta*, the first three tergites broadly, strongly and subequally impressed at base; legs longer, the hind tarsi rather long, slender and filiform, with the basal joint subequal to the next two combined. Europe..............................***Ischnopoda**

Form very slender, convex; mesosternal process extending rather beyond the middle of the acetabula and just attaining the acutely rounded tip of the narrow metasternal projection without intervening isthmus; prosternum short though rather strongly and posteriorly angulate before the coxae; head moderate, the antennae slender, the third palpal joint much longer than the second, the eyes well developed; neck about three-fifths as wide as the head; prothorax generally somewhat transverse, the elytra well developed, angulate externally at tip; abdomen very narrow, clavate, with the first three tergites very deeply impressed at base, the impressions coarsely sculptured and divided on the median line by a fine carina which joins the raised basal margin; legs long, slender, the hind tarsi moderate in length but slender, with the basal joint about as long as the next two combined; tarsal claws long, equal. Nearctic and Palaearctic regions........................**Tachyusa**

5 — Mesosternal process very finely pointed, free, long, extending rather beyond the middle of the acetabula and separated from the metasternal projection by a narrrow unimpressed isthmus........................6

Mesosternal process much more abbreviated and broader, not extending to the middle of the acetabula, free, separated from the metasternal projection by a short unimpressed isthmus, the middle coxae less approximate..7

Mesosternal process still shorter, the tip not at all free, broadly rounded or truncate and separated from the metasternal projection by a short but depressed isthmus, the coxae more or less widely separated......8

6 — Body rather stout, the prosternum short but strongly and posteriorly angulate before the coxae; head large, truncate at base, the eyes small, the antennae much elongated, the third palpal joint but little longer than the second, both unusually elongated; neck rather narrow, about a third as wide as the head; prothorax obtrapezoidal, wider than long, broadly impressed along the middle, rather acutely but broadly impressed along the median line; elytra normal; abdomen broad, feebly punctured, the three basal tergites impressed at base, the first more broadly; legs moderately long, the basal joint of the hind tarsi longer than the next two combined; integuments finely, closely sculptured and dull. Europe..***Xenusa**

Body slender, parallel, very small in size, shining and sparsely punctulate; connecting isthmus between the intermediate coxae unusually long, the metasternal projection very short, truncate, the dividing suture fine; head well developed, truncate at base, the palpi rather short, normal, the eyes small, the antennae short and stout, the subapical joints transverse; neck scarcely half as wide as the head; prothorax wider than long, obtrapezoidal and evenly convex, transversely impressed before the scutellum; elytra nearly as in *Tachyusa;* abdomen parallel and very evidently narrower than the elytra, the first three tergites rather strongly, subequally impressed at base; legs slender, the hind tarsi rather long, the basal joint longer than the next two combined. Pacific Coast of America. **Gnypetella**

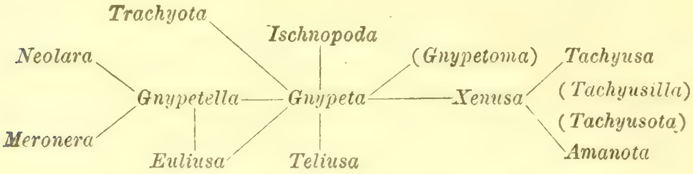
7 — Form stouter, the size less minute, the integuments extremely minutely, sparsely punctulate and polished throughout; prosternum short though strongly and posteriorly angulate; head moderate, rounded behind the eyes, the latter well developed and generally prominent; antennae more or less long and slender; prothorax wider than long, obtrapezoidal, with the sides more angulate anteriorly and thence more sinuate to the base than in *Gnypeta,* but with the short transverse impression before the scutellum as in that genus; elytra well developed, convex; abdomen nearly as wide as the elytra as a rule, with the first three tergites subequally and narrowly though deeply impressed at base; legs rather long and

slender, the hind tarsi unusually short, with the basal joint much shorter than the next two combined. Sonoran fauna of America. **Eulinsa**

8 — Body nearly as in *Neolara* though less stout, minute in size; mesosternal process extremely short, extending but little beyond anterior fourth of the acetabula, its tip truncate and separated from the long, convex, laterally ill-defined metasternal projection by a short flat isthmus, which extends obliquely in plane from the depressed apex of the metasternum to the tip of the mesosternum; prosternum well developed before the coxae, extending about three-fourths the way to the mesosternum, its tip obtuse and subparabolic; head well developed, arcuato-truncate at base, the palpi slender; antennae rather long, incrassate toward tip; eyes somewhat small but prominent; neck less than a third as wide as the head; prothorax wider than long, obtrapezoidal, strongly and almost evenly convex, not impressed in the middle before the base; elytra not angulate externally at tip; abdomen rather broad, parallel, the first three tergites rather narrowly and not strongly impressed at base; legs slender, the hind tarsi very slender, filiform, with the basal joint much elongated and about equal to the next two combined. America and Mexico. [=*Merona* ‖ Shp.]........................**Meronera**

Body somewhat as in *Tachyusa* but stouter; middle coxae still more widely separated than in *Meronera*, the mesosternal process very broadly arcuato-truncate at tip, extending to about anterior two-fifths of the acetabula, separated from the broad, anteriorly and gradually depressed, parallel, transversely convex and laterally ill-defined metasternal projection by a short and very wide isthmus inclining upward from the tip of the latter to the mesosternum, the entire structure somewhat as in *Meronera*; prosternum moderate before the coxae, broadly rounded posteriorly; head well developed, rounded behind, the palpi long and herissate, the eyes large and prominent; antennae moderately long, slender, slightly incrassate distally; neck distinctly less than half as wide as the head; prothorax not transverse, obtrapezoidal, convex, broadly, obsoletely impressed along the middle; elytra well developed, angulate externally at tip; abdomen much narrower than the elytra, subclaviform, the three basal tergites strongly and broadly impressed and coarsely sculptured at base as in *Tachyusa*, except that the impressions have no trace of medial carina; legs long, the hind tarsi very long, subequal in length to the tibiae, with the basal joint rather longer than the next two combined. South Africa......................***Amanota**

The apparent mutual affinities of the various genera are not very well brought out in the above table, and it is rather difficult to indicate this in the linear succession necessitated by a tabular arrangement. Their mutual relationships may be more readily appreciated by the following diagram, where the various groups are connected by lines representing bonds of affinity; subgenera to be subsequently defined are in brackets: —



The European genera *Borboropora* Kr., and *Mataris* Fauv., are not represented in the material before me at present and it is therefore impossible to advance any useful suggestions as to their proper place in the series. The genus *Euliusa* may be rather closely allied to *Rechota* Shp., but is probably not the same, and it is possible that the *Gnypeta mexicana*, of Sharp, may be a *Euliusa*. The foreign genera indicated above may be referred to as follows: —

NEOLARA Shp. — This name was recently proposed by Dr. Sharp for a small species resembling *Meronera* somewhat in external features, but differing in having the middle coxae still more widely separated, their acetabula defined throughout by an extremely fine but continuous bead and in having the prosternum much more developed between the coxae, with its apex drawn out and extremely acute. The following species may be assigned provisionally to the genus.

Rather stout, subparallel, only moderately convex, shining, pale piceo-testaceous in color, the abdomen more blackish, the antennae infuscate toward tip; head much wider than long with the hind angles rounded, minutely, rather sparsely punctate; antennae slender, extending to the middle of the elytra, gradually, rather feebly incrassate toward tip, the basal joint much longer than the second or third, the latter both elongate; prothorax barely as wide as the head, about a fourth wider than long, the sides strongly rounded and subprominent at apical third, thence converging and nearly straight to the broadly arcuato-truncate base, the angles obtuse and rounded; surface strongly convex, narrowly and very obsoletely impressed along the median line behind the middle, the punctures fine but close-set; elytra transverse, one-half wider and a third longer than the prothorax, the punctures somewhat finer than those of the prothorax and less close-set, the surface paler toward the humeri and broadly along the entire apex; abdomen slightly narrower than the elytra, parallel and straight at the sides, very minutely and rather closely punctulate, the basal impressions wholly impunctate; pubescence throughout short and inconspicuous; sixth ventral

very broadly, evenly arcuato-truncate at tip in the unique type. Length 2.2 mm.; width 0.7 mm. Cuba (Bahia Honda), — H. F. Wickham.
cubana n. sp.

The hind tarsi are missing in my only representative, but they probably do not depart greatly from the prevailing type in *Meronera*.

ISCHNOPODA Thoms. — The general facies in this genus is almost wholly similar to that of *Gnypeta*, but the middle coxae are very much more approximate and there are certain other differences, notably in the tarsi and palpi, which apparently indicate its validity. The diagnosis in the table was taken from the species described by Erichson under the specific name *umbratica*.

XENUSA Rey.— This is considered by the authorities of the most recent European catalogue to be a subgenus of *Myrmecopora* Saulcy, but I have never studied that genus, and therefore can form no opinion at present; *Ilyusa*, however, seems to be slightly different from *Xenusa*. *Xenusa* is certainly an isolated type of the subtribe and the two examples of *uvida* Er., before me, exhibit certain subspecific differences. One of them was collected in the south of France and the other in the Island of Corsica, the latter being rather less stout, with notably smaller head and prothorax and somewhat shorter antennae. These divergencies have been brought about in the insular form by reason of isolation undoubtedly, but the time through which this agency has been acting is of course unknown.

AMANOTA n. gen. — The type of this genus exhibits a remarkable combination of structural features characterizing other genera, but is, at the same time, an undoubtedly isolated species. The abdomen and elytra are strongly remindful of *Tachyusa*, and, the prothorax, of the genera allied to *Myrmecopora*, but the open middle acetabula, very widely separated coxae and long tarsi are characters quite unknown in those genera. The single species may be readily identified from the following description:—

Form rather stout, dark piceous-brown in color, the head and posterior parts of the abdomen blackish; legs and antennae paler, castaneous,

the abdomen toward base still paler and rufo-testaceous; head orbicular, rather shining, finely, somewhat closely punctured, feebly, impressed along the middle; antennae with the first three joints elongate and subequal in length; prothorax as long as wide, not quite as wide as the head, opaque, the punctures coarser than those of the head and closely crowded; sides at apical third prominently subangulate, thence moderately converging and feebly sinuate to the broadly arcuate base; disk very feebly impressed along the median line except toward apex; elytra large, wider than long, four-fifths wider and nearly a third longer than the prothorax, highly polished, submetallic in lustre, very minutely, evenly and not very closely punctulate; abdomen finely, rather sparsely punctulate, coarsely and densely punctured in the depressions, the surface posteriorly more closely and somewhat more strongly punctulate; sixth ventral feebly sinuato-truncate at tip in the male, rounded in the female. Length 2.8 mm.; width 0.72 mm. South Africa (Wellington).
capensis n. sp.

The abdomen, though as highly polished as the elytra, is less metallic in lustre; it is less elongate and stouter than in *Tachyusa* and only feebly narrowed toward base. The pubescence throughout is very short and inconspicuous.

Trachyota n. gen.

The type of this genus is a singularly isolated species described by LeConte under the name *Falagria cavipennis.* Its narrow head and prothorax, when contrasted with the hind body, long antennae, wide but very short, concave elytra, having peculiarly coarse rough punctures and elevated side margins, with the unusually full abdomen, are features imparting a facies wholly different from that of any other genus of the Tachyusae. Besides this type a second species was discovered several years ago by Mr. H. C. Fall, which it gives pleasure to make known at the present opportunity. The two species may be distinguished as follows: —

Form moderately slender, shining, subglabrous, the head and abdomen black; prothorax blackish-piceous, the elytra paler, piceo-testaceous; legs and antennae pale, the latter infuscate toward tip; head and pronotum very finely, remotely and subasperately punctulate; elytra coarsely, not densely, evenly punctured, the punctures very strongly asperate; abdomen extremely finely and remotely punctulate, the impressions wholly impunctate; head as long as wide, the antennae fully three-fifths as long as the body, with all the joints elongate, the first and third subequal in length and longer than the second, the outer joints gradually slightly thicker and unusually narrowed from their apices to their bases; prothorax rather longer than wide, as wide as the head, the sides broadly rounded anteriorly, becoming gradually and feebly convergent thence to the base, which is arcuato-truncate; surface convex, very broadly and moderately concave along the middle except toward apex; elytra transverse, fully four-fifths wider than the prothorax but not quite as long, not angulate externally at tip, the latter broadly emarginate at the suture, the sides acutely elevated, the disk concave along the margin; abdomen large and elongate, parallel, with the sides somewhat arcuate, rather wider than the elytra; legs long and slender. Length 3.0 mm.; width 0.68 mm. California ....**cavipennis** Lec.

Form very slender, shining, subglabrous, pale rufo-testaceous throughout the body, legs and antennae, the abdomen with a large blackish subapical cloud; head very small, including the mandibles slightly elongate, the antennae very slender, nearly as in *cavipennis* but less enlarged toward tip; prothorax somewhat longer than wide, distinctly wider than the head, together with the latter very finely, sparsely and asperulately punctate, the sides strongly rounded anteriorly, thence distinctly converging to the truncate base, the angles obtusely rounded; surface narrowly and extremely obsoletely impressed along the median line except anteriorly, also transversely and arcuately impressed toward the middle before the basal margin; elytra small, transverse, much shorter than the prothorax and scarcely more than a third wider, the sides rounding toward base, the lateral margins strongly elevated, the adjoining surface concave, more broadly behind, the punctures very strongly asperate, moderately close-set, becoming feeble or subobsolete postero-externally; scutellum large, broad, prominently elevated though but slightly convex; abdomen at base as wide as the elytra, in the middle more than a fourth wider, the sides parallel and strongly arcuate, the surface minutely, very remotely punctulate throughout; legs slender. Length 2.8 mm.; width of abdomen 7.2 mm. California (Pomona)..,................**lativentris** n. sp.

The male sexual characters in *cavipennis* consist of a strong tubercle at the centre of the first tergite and a posteriorly inclined spiniform tubercle near the extreme tip of the fifth, its apex projecting beyond the segmental apex; the sixth ventral is obscured in the only male before me. *Lativentris* is represented thus far in my collection by the female only. Each of the strongly asperate tuberculiform punctures of the elytra bears a short stiff inclined seta. It is probable that the species of *Trachyota* are associated in some way with ants, though I have no records from Mr. Fall on this subject.

Gnypeta Thoms.

The European fauna appears to include but three members of this genus, thus contrasting greatly with the American which is very rich, not only in species of *Gnypeta* but in several allied genera as well. In some more elongate and slender forms it seems to make a rather close approach to *Tachyusa*, to which genus a number of its species were originally assigned, but the resemblance is more apparent than real. The very narrow claviform abdomen and strongly angulate external tips of the elytra will readily distinguish the true *Tachyusa* from any *Gnypeta*, without referring at all to the very approximate coxae and acute mesosternal process, which, in *Gnypeta*, is always broader. In *Gnypeta* the apices of the elytra are never more than feebly oblique or moderately angulate at the sides externally, and, even when the basal impressions of the abdomen are strong, they are never medially carinate as they are in *Tachyusa*. The antennae are almost as diversified in length and thickness as in the genus *Aleochara*, enabling us to suggest a very convenient primary division among the numerous species. The general sculpture is fine but much less so as a rule than in the allied genus *Euliusa*, of the Sonoran fauna, and is usually much denser, frequently giving the integuments a duller appearance and the color is almost universally deep black, contrasting with the equally prevailing pale coloration of that genus. The twenty-two species represented in my cabinet can probably be identified through the following outline descriptions:—

Antennae short, although generally somewhat longer than the head and prothorax together 2

Antennae longer, always very much longer than the head and prothorax; apex of the elytra moderately angulate posteriorly at the sides.......8

2 — Antennae evidently longer than than the head and prothorax, the subapical joints never more than slightly wider than long; basal impressions of the abdomen more or less sparsely punctured or subimpunctate; species of the *carbonaria* type.... 3

Antennae not longer than the head and prothorax, more compact and incrassate distally, the subapical joints strongly transverse; basal impressions of the abdomen coarsely and densely punctured............7

3 — Basal impressions of the abdomen more or less coarsely and distinctly punctured 4

Basal impressions feebly and indistinctly punctured or apparently impunctate 5

4 — Form stout, convex, parallel, shining, deep black throughout the body, antennae and legs, the latter rufo-piceous distally; pubescence fine, moderate in length, decumbent, rather sparse but dark gray and distinct; head well developed, wider than long, abruptly narrowed at base, finely, rather closely punctate, with a large and oval, median impunctate depression; antennae extending to about basal third of the elytra, the second and third joints elongate and equal, the tenth almost as long as wide; neck four-fifths as wide as the head; prothorax short, slightly wider than the head, more than a fourth wider than long, the sides moderately prominent at apical third, thence feebly converging to the base; surface broadly, evenly convex, minutely, not closely and inconspicuously punctulate, with two very approximate coarse punctures in a short transverse impression just before the base; elytra well developed, parallel, wider than long with well marked humeri, a third wider and one-half longer than the prothorax, broadly, feebly sinuate toward the sides at tip, minutely, not densely and inconspicuously punctulate; abdomen almost as wide as the elytra, parallel, the border thick but rapidly thinner on the fifth segment, the punctures minute and rather close-set but inconspicuous, the three basal impressions deep and coarsely but not densely punctate; hind tarsi short, the first three joints rapidly decreasing in length. Length 2.9 mm.; width 0.78 mm. Montana (Kalispell), — H. F. Wickham.................**helenae** n. sp.

Form nearly similar to the preceding, much smaller, shining, black, the elytra very dark, the entire legs paler, castaneous; antennae blackish-piceous; punctures minute and somewhat close-set throughout, the vestiture short and not very conspicuous; head and antennae nearly as in *helenae*, the second joint of the latter rather longer and thicker than the third; middle of the vertex with a smaller, deep, rounded and impunctate impression; prothorax nearly similar but relatively somewhat smaller, scarcely wider than the head, unimpressed, the two basal foveae similarly well marked; elytra more elongate, but slightly transverse, similarly impressed on the suture toward base and with widely exposed humeri, one-half wider and longer than the prothorax; abdomen parallel, narrower than the elytra, the punctures rather stronger than in *helenae* and equally close-set; legs rather short and stout, the hind tarsi fully three-fourths as long as the tibiae, with the first joint shorter than the next two combined, the bristling setae long. Length 2.3 mm.; width 0.68 mm. Arizona (Benson),— G. W. Dunn.

deserticola n. sp.

Form subparallel and rather stout, shining, finely, closely punctulate throughout but especially on the abdomen, the pubescence not conspicuous, black, the elytra feebly picescent, the legs piceous, gradually paler distally, the antennae blackish, scarcely paler toward base; head nearly as long as wide, broadly rounded behind at the sides, the eyes moderate, the vertex broadly, feebly and indefinitely impressed; antennae gradually and rather strongly incrassate distally, the second joint obviously longer but scarcely thicker than the third, the two or three subapical joints evidently wider than long; prothorax fully a fifth wider than long, slightly wider than the head, the sides broadly rounded at apical third, thence moderately converging and straight to the basal angles, the surface with a small and feeble, transverse and obsoletely bifoveolate impression before the scutellum; elytra distinctly transverse, two-fifths wider and longer than the prothorax, impressed on the suture just behind the scutellum, the humeri moderately exposed at base; abdomen parallel, distinctly narrower than the elytra, the punctures of the basal impressions rather well separated; basal joint of the hind tarsi slightly shorter than the next two combined. Length 2.2 mm.; width 0.61 mm. California (Pomona), — H. C. Fall. **punctulata** n. sp.

Form less stout, more depressed and less shining, though colored as in *helenae*, the punctures throughout rather fine but deep and very close-set, on the abdomen scarcely smaller but much less approximate, the latter more shining; head moderate, slightly wider than long, flattened and scarcely visibly impressed toward the middle, the antennae somewhat less elongate than in *helenae*, with the second joint evidently longer and somewhat thicker than the third, the outer joints obtrapezoidal, the tenth rather distinctly wider than long; prothorax evidently wider than the head, the outline nearly as in *helenae*, the surface very finely, feebly impressed along the median line except toward tip, with a short deep transverse impression before the scutellum; elytra large, slightly transverse, parallel, two-fifths wider and fully one-half longer than the prothorax; abdomen parallel, very distinctly narrower than the elytra, the basal impressions distinctly and somewhat coarsely but not very closely punctate; legs rather stout, the hind tarsi short, the basal joint almost as long as the next two combined. Length 2.3 mm.; width 0.65 mm. California (Monterey Co.). [=*Tachyusa crebr.* Csy.]. **crebrepunctata** Csy.

5 — Abdomen broad, parallel with the sides arcuate, in the middle nearly as wide as the elytra. Body stout, polished, black, the elytra feebly picescent, the antennae piceous, the legs pale brownish-testaceous; punctures minute and only moderately close throughout, the pubescence dark ashy, short, the abdominal segments each with a porrect fringe of long cilia as usual; head with rather stronger punctures than elsewhere, feebly flattened, with a small deep impression at the middle, the median line broadly impunctate throughout; neck rather more than two-thirds as wide; second and third antennal joints equally elongate; prothorax as in *helenae* but smaller and less transverse, not wider than the head, feebly impressed along the middle basally and with a short transverse impression including two large foveae before the scutellum; elytra moderately transverse with widely exposed humeri, fully one-half wider and a third longer than the prothorax; abdominal impressions wholly impunctate and highly polished; legs slender, the hind tarsi two-thirds as long as the tibiae, the basal joint slightly shorter than the next two combined. Length 2.9 mm.; width 0.8 mm. Arizona. **ventralis** n. sp.

Abdomen nearly as in *ventralis*. Body much smaller, moderately stout, polished, blackish-piceous in color; legs pale, the antennae dark, paler toward base; punctures minute and rather sparse throughout, the pubescence inconspicuous, longer on the abdomen; head as long as wide, very feebly impressed at the middle of the occiput, parallel at the sides, the basal angles broadly rounded, the eyes rather small; antennae slender toward base, somewhat rapidly incrassate distally, the subapical joints distinctly wider than long; prothorax equal in width to the head, a fifth or sixth wider than long, widest at about apical third, where the sides are rounded and moderately prominent, thence distinctly converging and somewhat sinuate to the basal angles, the surface with a small and feeble transverse impression before the scutellum; elytra transverse, two-fifths wider than the prothorax but only slightly longer, the humeri widely exposed at base; abdomen parallel with evenly arcuate sides, at the middle distinctly wider than the elytra, the three basal impressions equal, narrow, deep and wholly impunctate. Length 1.9 mm.; width 0.65 mm. Florida............**floridana** n. sp.

Abdomen at every point distinctly narrower than the elytra, parallel, with the sides straight or nearly so.. 6

6 — Form rather stout, moderately convex, highly polished, deep black throughout, the antennae piceous-black, the legs paler, piceo-testaceous; punctures throughout extremely minute and not close-set, the vestiture short, fine and inconspicuous; head moderate, finely, very feebly impressed along the median line, where the punctulation also becomes subobsolete; second and third antennal joints equally elongate; neck two-thirds as wide; prothorax barely perceptibly wider than the head transverse, nearly two-fifths wider than long, of the usual form, the hind angles obtuse but not in the least rounded, the surface broadly, evenly convex, only punctulate toward the middle and along the base, elsewhere impunctate, the two approximate impressed foveae before the scutellum distinct, otherwise wholly unimpressed; elytra somewhat, less than one-half wider and longer than the prothorax, impressed on the suture behind the scutellum as usual; abdomen sparsely punctulate, with thick border and convex tergites, the basal impressions wholly impunctate and polished, excepting a sparse series of extremely obsolete punctures along the basal elevations; legs moderately short, the hind tarsi fully two-thirds as long as the tibiae, the basal joint short, the first three decreasing uniformly in length. Length 2.4 mm.; width 0.7 mm. Missouri (St. Louis),— G. W. Bock...................**bockiana** n. sp.

Form moderately stout, somewhat depressed, alutaceous in lustre, the punctures minute and very close-set throughout, deep black throughout the body and antennae; legs blackish, the tarsi testaceous; pubescence very short, inconspicuous; head moderate, convex, very finely, feebly impressed along the median line only for a short distance at the middle of the vertex; antennae fully attaining basal third of the elytra, the second joint rather longer than the third and more cylindrical as usual; basal constriction abrupt, the neck nearly three-fourths as wide; prothorax unusually short, much wider than the head, nearly one-half wider than long, the sides nearly straight and subparallel, rounded anteriorly, the basal angles obtuse and not rounded, the base arcuate; surface broadly impressed along the middle in more than basal half, the transverse ante-basal impression feeble, with its two foveae distinct; elytra about two-fifths wider and nearly one-half longer than the prothorax, the sutural impression behind the scutellum broad and feeble; abdomen with the segments feebly convex, the border only moderately thick, the basal impressions more coarsely punctured but with the punctures extremely obsolete, so that they appear to be impunctate and polished; legs rather short but slender, the hind tarsi filiform, two-thirds as long as the tibiae, the basal joint not quite as long as the next two combined. *Male* with a small, extremely shallow, rounded sinus at the tip of the sixth ventral plate. Length 2.3 mm.; width 0.65 mm. Manitoba (Winnipeg)..............**manitobae** n. sp.

7 — Form narrow, elongate, parallel, convex, moderately shining, castaneous, the abdomen blackish posteriorly, the antennae piceous, the legs testaceous; punctures anteriorly very fine, moderately close, of the elytra stronger, closer and asperulate, of the abdomen less close and feebly asperulate; pubescence rather inconspicuous; head small, with a very small faint impression at the middle of the vertex; antennae stout, the second and third joints much less elongate than usual, equal and each much shorter than the first; prothorax of the usual form, rather more than a third wider than long, much wider than the head, the sides converging and nearly straight from anterior third to the base, broadly rounded anteriorly; surface convex, not evidently impressed along the median line, the short transverse ante-basal impression confusedly foveolate; elytra about two-fifths wider and longer than the prothorax, the apical external angulation rather stronger than in the preceding species, the post-scutellar impression broad and feeble; abdomen slightly narrowed from apical third to the base but distinctly narrower than the elytra at every part, the first three tergites more convex, broadly and deeply impressed at base both dorsally and ventrally, with the impressions coarsely and closely punctured, the entire conformation recalling *Tachyusa*; legs rather long, the hind tarsi three-fourths as long as the tibiae, the first joint as long as the next two combined; sixth ventral evenly rounded at tip, broadly in the male. Length 2.4–2.8 mm.; width 0.6 mm. British Columbia. (Kamloops and Glenora), — H. F. Wickham.....................................**brevicornis** n. sp.

8 — Prothorax widest at about apical third as usual, the hind angles obtuse but distinct and not at all rounded; basal impressions of the abdomen always coarsely and distinctly punctured..............................9

Prothorax widest only slightly before the middle, the hind angles narrowly rounded as well as obtuse; basal impressions of the abdomen virtually impunctate. [*Gnypetoma* n. subgen.]..............................19

9 — Species of the Atlantic Coast region..............................10

Species of the Rocky Mountain regions..............................11

Species of the Pacific Coast fauna..............................12

10 — Form only moderately stout, convex, shining, deep black throughout, the antennae piceous-black, the legs dark piceo-testaceous; punctures very fine, rather close-set but inconspicuous, equally close but still finer on the abdomen; pubescence not conspicuous; head wider than long, strongly impressed along the median line at the middle of the vertex, where the surface becomes subimpunctate, more broadly anteriorly; eyes large; neck very wide; antennae nearly as long as

the ante-abdominal part of the body, feebly and gradually incrassate, the first three joints equal in length, much elongated, the tenth perceptibly longer than wide; prothorax slightly wider than the head, fully two-fifths wider than long, the sides broadly rounded anteriorly, thence unusually feebly converging to the base, the surface rather narrowly and distinctly impressed along the median line except apically and with a short and very feeble transverse impression before the base, also with four small rounded impressions forming a very large median quadrilateral — perhaps accidental in the type; elytra two-fifths wider and one-half longer than the prothorax, the humeri only moderately exposed and rounded, the post-scutellar impression rather small and feeble; abdomen parallel, much narrower than the elytra, the basal impressions of the first three tergites wholly impunctate toward the raised basal margin but with a transverse irregular series of somewhat close-set coarse punctures posteriorly, the fourth tergite also narrowly impressed and slightly more coarsely punctate along the basal margin; legs rather long and slender, the hind tarsi three-fourths as long as the tibiae, with the first three joints rapidly decreasing in length, the second and fifth equal. Length 2.8 mm.; width 0.68 mm. Pennsylvania. [=*Tachyusa nig.* Lec.] .... **nigrella** Lec.

Form more depressed, very highly polished, deep blue-black throughout, the legs nearly black with the tarsi paler, the antennae piceous-black; punctures very fine, rather close-set, inconspicuous, especially on the abdomen; pubescence very short and indistinct; head nearly as in *nigrella*, the eyes smaller and less prominent, the impression broader, the antennae stouter but less incrassate distally, extending to the middle of the elytra, the third joint slightly longer than the second and both much shorter than the stouter fusiform first joint, the tenth barely as long as wide; prothorax transverse, slightly wider than the head, the sides broadly subangulate anteriorly, thence moderately converging and broadly sinuate to the base, the surface unimpressed along the median line, but with an unusually large wide transverse impression before the base, the impression confusedly punctulate at each side of the middle; elytra relatively very large, one-half wider and two-thirds longer than the prothorax, the humeri widely exposed and rectangular, the post-scutellar impression large, broad and strong; abdomen very much narrower than the elytra, parallel and straight at the sides, the basal impressions coarsely but not very closely punctured and still less closely toward the basal margins; legs slender, the tarsi nearly as in *nigrella;* sixth ventral sharply angulate at tip in the female, the male not known. Length 2.6 mm.; width 0.75 mm. New York (Catskill Mts.) .... **atrolucens** Csy.

11 — Body sublinear but somewhat stout, convex, moderately shining, piceous-black in color, the antennae but little paler though paler toward base, the legs brown; punctures minute and very close-set throughout; pubescence very short but dense and distinct; head rather small, the sides converging and arcuate behind the eyes to the base, the vertex feebly flattened and broadly less punctate anteriorly, with a small feeble impression at the middle; antennae long, stout, strongly incrassate distally, the third joint much longer than the second and as

long as the first but thinner, the tenth not quite as long as wide; prothorax unusually elongate, only slightly wider than long, the sides very obtusely subangulate anteriorly, thence distinctly converging and straight to the base, the surface strongly impressed along the middle from before the centre nearly to the base, becoming gradually slightly wider but without trace of a transverse ante-basal impression; elytra moderate, two-fifths wider and longer than the prothorax, the humeri only moderately exposed and somewhat rounded, the post-scutellar impression rather narrow and deep; abdomen very distinctly narrower than the elytra parallel and nearly straight at the sides, very closely, punctulate, the deep basal impressions with moderately coarse, deep punctures, which are close-set throughout, but not at all crowded; legs long and not very slender, the hind tarsi pale, three-fourths as long as the tibiae, the first joint very nearly as long as the next two combined. *Male* with a small, broadly angular notch at the apex of the sixth ventral. Length 2.9–3.1; width 0.7 mm. Utah (Provo) and Montana (Kalispell),— H. F. Wickham.................. **incrassata** n. sp.

12 — Abdomen parallel and straight at the sides throughout or virtually so.. 13

Abdomen distinctly narrowed from near the apex to the base............ 14

13 — Head larger, nearly as wide as the prothorax, less narrowed at base, the neck broader. Form rather stout, strongly convex, shining, black, the legs and antennae rufo-piceous; punctures very minute and only moderately close-set; pubescence somewhat coarse and distinct; head with a deep rounded impression at the middle of the vertex; the eyes moderate; antennae thick but only feebly incrassate distally, the third joint slightly longer than the second, but not as long as the first and thinner as usual, the tenth not as long as wide; prothorax only slightly transverse, a fourth or fifth wider than long, the sides anteriorly broadly rounded, thence moderately converging and nearly straight or less arcuate to the base, the surface, broadly, feebly concave toward the median line, except anteriorly, but without a distinct ante-basal transverse impression; elytra well developed, nearly one-half wider and longer than the prothorax, the humeri moderately exposed and subrectangular, the post-scutellar impression small and somewhat feeble; abdomen very much narrower than the elytra, the deep basal impressions coarsely punctured, the punctures crowded as in *Tachyusa;* legs long, rather stout, the hind tarsi with the basal joint about as long as the next two combined. Length 2.6 mm.; width 0.68 mm. California (Ojai),— H. C. Fall............. **leviventris** n. sp.

Head nearly as in the preceding species. Form rather stout, moderately convex, shining, finely, closely punctulate, the abdomen sparsely so toward base, black, the legs piceous, the antennae brownish-fuscous; head obviously wider than long, rather abruptly constricted at base with rounded angles, the eyes at much less than their own length from the base in the male, scarcely as large in the female, the vertex with a small, strong and rounded impression in the former, which becomes much larger in the latter sex, its bottom punctureless and polished; antennae extending rather beyond the middle of the elytra, slender, gradually and feebly incrassate distally, the second joint evidently longer than the third, the subapical as long as wide in the male, rather more elongate in the female, the eleventh pointed and apparently impressed laterally at apex; prothorax scarcely visibly wider than the head in the male, distinctly so in the female, a fifth wider than long in the former and fully a fourth in the latter, widest and broadly rounded at the sides near apical third, the sides thence feebly converging and almost straight to the base; surface with a small, transverse and approximately bifoveate impression before the scutellum in both sexes, the median line finely impressed almost throughout, very obsoletely in the female; elytra nearly one-half wider and longer than the prothorax, feebly impressed behind the scutellum, the humeri well exposed at base; abdomen parallel and straight at the sides, distinctly narrower than the elytra, the moderately coarse punctures of the basal impressions well separated. *Male* with the sixth ventral plate broadly, feebly sinuate in about median third. Length 3.0 mm.; width 0.8 mm. Oregon (Portland),— H. F. Wickham. **oregona** n. sp.

Head distinctly narrower than the prothorax in the female, probably less obviously so in the male, the neck broad as in the two preceding species. Form moderately stout and convex, polished, the punctures fine and rather sparse throughout, closer toward the apex of the abdomen, piceous-black, the elytra somewhat paler; legs dark testaceous, the antennae blackish; head transverse, arcuately narrowed at base, the eyes rather large, the surface concavely impressed along the median line from near the front to the base of the occiput; antennae extending beyond the middle of the elytra, slender, feebly incrassate distally, the second joint distinctly longer than the third, the subapical scarcely as long as wide, the eleventh pointed and laterally impressed at tip; prothorax transverse, nearly a third wider than long, of the usual obtrapezoidal form, the sides rounded at apical third, the disk having the usual feeble bifoveolate impression before the scutellum; elytra transverse, two-fifths wider and a third longer than the prothorax, narrowly and briefly impressed on the suture at base, the humeri moderately exposed and obliquely rounded; abdomen parallel, distinctly narrower than the elytra, the moderately coarse punctures of the basal impressions sparse, rather distinct in the first but virtually obsolete in the third. *Male* unknown. Length 2.1 mm.; width 0.63 mm. California (Yuma)................................**impressiceps** n. sp.

Head smaller, much narrower than the prothorax, more strongly, arcuately narrowed to the base or more orbicular, the neck narrower, barely three-fifths as wide as the head. Form very slender, polished, black, the abdomen toward base dark, and the legs and antennae pale, rufopiceous; punctures rather close-set but minute throughout, the pubescence somewhat inconspicuous; head nearly as long as wide, with a rounded impression at the middle of the vertex; antennae distinctly incrassate distally; prothorax rather more than a fourth wider than long, the sides broadly rounded anteriorly, thence distinctly converging and straight to the obtuse but very conspicuous basal angles, the surface as a rule not impressed along the median line except deeply near the basal margin, but often broadly and irregularly concave — probably accidentally,— without distinct transverse impresssion; elytra well developed, much wider and longer than the prothorax, the humeri widely exposed but somewhat rounded, the post-scutellar impression short but rather deep; abdomen slender, very much narrower than the elytra and about as wide as the prothorax, the basal impressions coarsely and densely punctured; legs slender, moderately long. *Male* with a very small angular sinus, not more than a fourth or fifth as wide as the segment at the apex of the sixth ventral. Length 3.0 mm.; width 0.63 mm. California (Mendocino to Pomona). [= *Tachyusa lin.* Csy.]. **linearis** Csy.

14—Elytra relatively broader, the humeri widely exposed at base though obtusely rounded; general form moderately convex................15

Elytra relatively narrower, the humeri only slightly exposed; form strongly convex..18

15—Elytra large and well developed, the suture much longer than the prothorax as usual. Form parallel, stouter than in *linearis*, moderately shining, piceous-black, the under surface behind the third ventral blackish; legs pale testaceous, the antennae piceous; pubescence rather coarse and distinct, the punctures very minute and rather close-set but sparser on the abdomen; head moderate, obliquely narrowed behind, the neck rather more than two-thirds as wide, the vertex with a rather shallow and rounded median impression; antennae scarcely extending to basal two-fifths of the elytra, the first three joints subequal in length, the outer joints only feebly incrassate, the tenth not quite as long as wide; prothorax obviously, though not greatly, wider than the head, only very slightly wider than long, the sides very feebly and broadly subangulate at apical two-fifths, thence distinctly converging to the well-marked basal angles, the surface convex, scarcely visibly impressed along the middle posteriorly, with a short feeble transverse ante-basal impression; elytra but slightly transverse, very much wider and longer than the prothorax, the post-scutellar impression deep and slightly elongate; abdomen widest at the apex of the fourth segment, where it is distinctly narrower than the elytra, the sides thence feebly converging and straight to the base, the basal impressions very deep, coarsely and densely punctured, the fourth tergite also impressed and coarsely punctate at base; legs rather long, the first three joints of the hind tarsi rapidly decreasing in length. *Male* with the angular sinus of the sixth ventral larger and deeper than in *linearis*. Length 3.2 mm.; width 0.78 mm. California (Mendocino Co.). [=*Tachyusa exp.* Csy.]..............................**experta** Csy.

Elytra much shorter and more strongly transverse, the suture never more than very slightly longer than the prothorax; form sublinear........16

16—Prothorax not transverse, hexagonal, not wider than the head. Body slender, shining, black, the three basal ventrals somewhat paler; legs pale, the antennae piceous-black; punctures very fine, granuliform, close-set, the pubescence fine and inconspicuous; head rounded, fully as long as wide, the eyes rather small; neck but little more than half as wide; vertex with a very small rounded impression; antennae gradually and rather strongly incrassate, the second and third joints elongate, subequal, each somewhat longer than the first, the ninth and tenth slightly transverse; prothorax not distinctly wider than long, the sides broadly, obtusely angulate at apical third, thence rather strongly converging and nearly straight to the base, the surface with a small transverse bifoveolate impression before the basal margin; elytra transverse, fully one-half wider but only about a fourth longer than the prothorax, the suture scarcely at all longer than the latter, impressed as usual behind the scutellum; abdomen broadly arcuate at the sides, as wide as the elytra posteriorly, the basal impressions deep, coarsely and densely punctured, the fourth tergite also impressed and more coarsely punctate along the basal margin; three basal joints of the hind tarsi uniformly and rapidly decreasing in length. *Male* with the apical margin of the sixth ventral ciliate and beveled throughout the width, also sinuate. Length 2.75 mm.; width 0.58 mm. California (Siskiyou Co.). **curtipennis** n. sp.

Prothorax transverse, rounded at the sides anteriorly, thence distinctly, rectilinearly narrowing to the base, very much wider than the head.. 17

17 — Body stouter, linear, dark piceous, the abdomen blackish, the three basal segments paler, moderately shining; legs pale, the antennae fuscous, rufous toward base; punctures very small, close-set, granuliform, the pubescence inconspicuous; head small, rounded, the eyes small, prominent, the impression of the vertex minute and feeble; antennae gradually and distinctly incrassate, the second joint much elongated and longer than the first or third, the outer joints slightly transverse; prothorax about a fourth wider than long, impressed along the middle from apex to base, the impression gradually increasing in width posteriorly; elytra about two-fifths wider and scarcely a third longer than the prothorax, the suture about a fourth longer than the latter, impressed behind the scutellum; abdomen nearly as in *curtipennis* but perceptibly narrower than the elytra even posteriorly, less closely punctulate than the anterior parts; legs slender, the three basal joints of the hind tarsi rapidly decreasing in length. *Male* with a small simple triangular sinuation at the apex of the sixth ventral plate nearly as in *curtipennis*, about a third as wide as the segment and three times as wide as deep. Length 2.9 mm.; width 0.63 mm. Oregon (Lane Co.). **abducens** n. sp.

Body more slender, smaller in size, shining, testaceous in color with a blackish cloud at the abdominal apex; legs and antennae pale, the latter fuscous toward tip; punctures minute, subgranuliform and only moderately close-set, the pubescence inconspicuous; head nearly as in *abducens*, the antennae notably longer, extending fully to the middle of the elytra, the three basal joints as in *abducens*, the subapical longer, scarcely wider than long; prothorax nearly similar but with the impression obsolete behind the apex; elytra not well developed, transverse, about a third wider but scarcely perceptibly longer than the prothorax, the suture about equal in length to the latter, the post-scutellar impression deep and distinct; abdomen narrower, very much narrower than the elytra at every point, the sides very feebly arcuate, the width only slightly greater posteriorly, the deep basal impressions densely and coarsely punctured; legs very slender, the hind tarsi almost four-fifths as long as the tibiae, with the four basal joints decreasing uniformly and rapidly in length, the second and fifth subequal; claws long and very slender as in the preceding; sixth ventral broadly rounded at apex in the unique female type, which may be somewhat immature. Length 2.4 mm.; width 0.52 mm. California (Siskiyou Co.)...**shastana** n. sp.

18 — Form sublinear, strongly convex, somewhat alutaceous, black, the abdomen toward base dark, the legs paler, piceo-testaceous, the antennae piceous; punctures small, granuliform, very close-set, less so on the head and abdomen; pubescence short and not conspicuous; head small, rounded, finely, linearly impressed on the median line near the middle of the vertex, the eyes moderate, not prominent; antennae long and stout, gradually and rather strongly incrassate distally, the first three joints subequal, the second slightly the longest, the first stouter as usual, the tenth about as long as wide; prothorax large, convex, only very slightly wider than long, much wider than the head, the sides very broadly arcuate, becoming straight and convergent toward base, the surface broadly and strongly impressed along the middle except toward tip; elytra but little wider than long, about a fourth wider and a fifth longer than the prothorax, with a large and broadly impressed area behind the scutellum; abdomen posteriorly broadly arcuate at the sides and as wide as the elytra, narrowed only slightly toward base, the three basal depressions deep and coarsely, densely punctate; legs long and rather stout, the hind tarsi with the basal joints diminishing in length as usual. *Male* sexual characters feeble, the fifth ventral with a very feeble sinuation in median seventh or eighth, the sixth narrow, sinuato-truncate at tip. Length 2.8 mm.; width 0.65 mm. California (Sonoma Co.). [=*Tachyusa har*. Csy.] .... **harfordi** Csy.

Subgenus **Gnypetoma** Csy.

19 — Form sublinear, strongly convex, highly polished, blackish-piceous, the basal ventrals dark, the legs and antennae pale, testaceous; punctures extremely minute, only moderately close-set and asperulate on the pronotum and elytra, largely obsolete on the head, except toward the sides and base, and sparse on the abdomen; vestiture inconspicuous; head moderate, rounded, the eyes not prominent, the vertex scarcely impressed, the maxillary palpi long, glabrous but herissate with stiff suberect setae; antennae unusually developed, slender, gradually and strongly incrassate distally, the second and third joints much elongated, equal, each somewhat longer than the first, the tenth about as long as wide; prothorax only just visibly wider than long and but little wider than the head, unusually narrowed anteriorly, rounded at the sides, strongly convex, with a strong elongate-triangular depression before the basal margin; elytra two-fifths wider and a fourth longer than the prothorax, the humeri rather well exposed, the suture only obsoletely impressed at base; abdomen toward tip broadly arcuate at the sides and somewhat wider than the elytra, the sides distinctly converging toward base, where it is but slightly narrower than the elytra, the basal impressions of the first three tergites narrow, very deep, subequal and impunctate; legs rather long and slender, the hind tarsi very short, but little more than half as long as the tibiae, the basal joint subequal to the next two combined. *Male* with the sixth ventral broad, with a broad and feeble sinuation toward the middle at apex. Length 2.7 mm.; width 0.7 mm. New Jersey (Elizabeth). [=*Tachyusa balt*. Lec.]. **baltifera** Lec.

The material in my cabinet is not sufficiently extensive to enable me to make a thoroughly satisfactory investigation of the somewhat varied male sexual characters of this genus, which, not only in this respect but in general structure and habitus, is rather heterogeneous. Most of the species of the table resembling the typical *carbonaria*, are described from uniques and they all have the sixth ventral rounded at tip, but whether they are all females or whether the male in typical *Gnypeta* lacks the apical sinus of the elongate forms having more developed antennae and sometimes having the first four abdominal tergites impressed at base, is unknown to me at present. There are some special characters as well, for example the female of *atrolucens*, which is also aberrant in general appearance, has the sixth ventral plate sharply angulate at tip, this being the only instance known as yet. Some of the species strongly recall *Tachyusa* in general appearance and I have but little doubt that, when the very numerous species still to be discovered can be fully studied, the genus as above constituted will be divided into a number of generic or subgeneric groups. It seems scarcely worth while to point out more than one of these at present, but the characters of the species identified above as *baltifera* Lec., from description alone, seem to warrant the erection of a special subgenus because of the form of the prothorax and especially the rounded hind angles of the latter.

Teliusa n. gen.

The single type of this genus, while resembling a normal *Gnypeta* somewhat in general outline, differs very greatly in facies because of the fine dense sculpture and the dense vestiture of very short fine pale hairs, clothing the entire body, legs and antennae, so that a satisfactory examination of the tarsal joints is a matter of some difficulty; it may be described as follows: —

Form rather stout and convex, pale rufo-testaceous in color, the head blackish, the elytra somewhat clouded except toward the apex and near the humeri; posterior segments of the abdomen black, the legs and antennae pale, the latter somewhat feebly infumate distally; entire body extremely minutely and densely asperulato-punctate, the abdomen particularly densely so, dull in lustre, the head rather less densely sculptured and more shining; head fully as long as wide, the eyes large and rather convex, the tempora short behind them; surface very feebly impressed along the median line of the vertex; antennae very long and slender, extending rather beyond the tips of the elytra, very feebly incrassate distally, the joints elongate, the three penultimate as long as wide, the eleventh slender, as long as the two preceding combined; prothorax scarcely visibly wider than the head and very slightly wider than long, widest at apical third, where the sides are broadly rounded, thence feebly convergent and straight to the base, which is feebly arcuate; surface obsoletely impressed along the median line almost throughout, not at all transversely impressed before the scutellum; elytra two-fifths wider and a third longer than the prothorax, the humeri somewhat exposed at base, rounded; abdomen not quite as wide as the elytra, parallel, with evenly and conspicuously arcuate sides, the tergites flat; legs long and slender. Length 2.0 mm.; width 0.6 mm. Texas (Brownsville), — H. F. Wickham........................ **alutacea** n. sp.

The sixth ventral of the male appears to be very broadly and feebly bilobed at tip.

Tachyusa Erichs.

The approximation to this genus in general appearance made by certain forms of *Gnypeta*, especially the slender and sublinear species of the *abducens* type, has been alluded to above. The species here assigned to *Tachyusa* are perfectly homogeneous, however, and may be distinguished from any *Gnypeta*, even those in which the abdomen is posteriorly dilated, by the more approximate middle coxae and the more slender and generally very acutely pointed, though equally free, mesosternal process attaining the metasternal projection or virtually so, the intervening depressed isthmus of *Gnypeta* being obsolete or extremely short. They are also distinct from that genus in their more attenuate form and especially by the relatively more slender claviform abdomen, in which the deep basal impressions of the first three tergites are arcuate and not straight and are carinate in the middle, the carina joining the elevated basal margin through a posteriorly projecting cusp which I have never noticed in *Gnypeta;* the depressions are always very coarsely punctate and so densely so that the intervals are acutely elevated, forming short longitudinal ridges. The medial carina is, however, obsolete in certain forms indicated below as subgenera of *Tachyusa* for present convenience. The eyes are well developed, the antennae long, gradually incrassate distally, the neck rather wide, the prothorax obtrapezoidal, wider than long, with the hind angles more than right but always very distinct and not in the least blunt. The elytra are well developed, each oblique at tip, the external sides strongly projecting posteriorly, forming a strong sublateral sinus and the legs are long and slender. The sexual characters are remarkable, the pronotum in the male being evenly convex or nearly so, while in the female it is generally broadly and strongly impressed along the middle, and, besides, is frequently more opaque, due to a minute reticulation which may not appear at all in the male; the latter sex has the sixth ventral plate minutely and angularly to feebly and broadly sinuate at tip as in *Gnypeta*. The homogeneity of the genus renders a satisfactory tabular statement of the differential characters much more difficult than in *Gnypeta*, but it is hoped that the following table may aid in the identification of the rather numerous species:—

Abdomen highly polished, extremely remotely and rather less finely punctulate; mesosternal process wider than usual, truncate or rounded at tip but attaining the metasternum..................................2

Abdomen minutely and closely punctulate, alutaceous or pruinose; species smaller..3

2 —Antennae very slender, only very feebly incrassate distally. Body stouter than usual, polished, piceous-black, the legs and antennae blackish, the tarsi paler, the basal ventrals somewhat rufescent; vestiture inconspicuous; head well developed, orbicular, minutely, sparsely punctate, the vertex broadly impunctate and feebly concave toward the middle; antennae extending to the tips of the elytra, the second and third joints much elongated, the latter rather longer than the first, the tenth distinctly elongate; prothorax only very slightly transverse and evidently wider than the head, scarcely a fifth wider than long, the sides narrowly rounded anteriorly, thence moderately converging and almost straight to the base, the surface finely, granularly and somewhat closely punctured, not reticulate, broadly concave along the median line in the female, very narrowly and obsoletely so in the male; elytra about two-fifths wider and longer than the prothorax, the humeri moderately exposed, the suture not impressed behind the scutellum, the punctures fine, not close-set and asperulate; abdomen highly polished; hind tarsi about two-thirds as long as the tibiae, the basal joint not as long as the next two combined; sixth ventral of the female broadly rounded, very feebly

sinuato-truncate in the male. Length 2.7–3.2 mm.; width 0.65 mm. New York (Catskill Mts.), — H. H. Smith................**smithi** n. sp.

Antennae slender toward base but rather strongly incrassate toward tip. Form more elongate and slender than in *smithi*, shining, testaceous, the head piceous, the abdomen black posteriorly; legs testaceous, the antennae fuscous, paler basally; pubescence inconspicuous; head orbicular, minutely, sparsely punctulate, the vertex very broadly impunctate but scarcely impressed; antennae extending fully to the tips of the elytra or further, very slender but rather rapidly and strongly incrassate distally, the tenth joint not quite as long as wide; prothorax only very slightly wider than long, not wider than the head, the sides more broadly rounded anteriorly and less converging thence to the base than in *smithi*, the minute punctures granuliform and rather close-set basally, finer and sparser anteriorly, the surface broadly concave along the median line, a transversely arcuate series of larger punctures before the base generally distinct; elytra nearly as long as wide, two-fifths wider and longer than the prothorax, the sides parallel and broadly arcuate as usual; humeri rather well exposed, the punctures as in *smithi*, fine, asperulate and sparse, almost wanting toward apex; hind tarsi nearly as in *smithi* though still shorter; sixth ventral of the female broadly rounded behind, the male not at hand. Length 2.65 mm.; width 0.53 mm. Virginia..**gracillima** Lec.

3 — Species of the Atlantic regions. 4

Species of the Sonoran fauna...11

Species of the Pacific coast fauna....................................12

4 — Vestiture abundant, more or less distinct and moderately pale but scarcely giving a pruinose effect on the abdomen, the latter rather strongly shining..5

Vestiture very dense, pale ashy, giving a strongly pruinose effect even on the abdomen; legs and basal joint of the antennae pale honey-yellow, the antennae fuscous, paler toward base..............................10

5 — Legs piceous with the tarsi pale yellow, less minute in size, the pronotum of the female not concave along the middle. Very slender, convex, shining, blackish-piceous, the two basal ventrals paler and dark rufous, the antennae fusco-rufous; vestiture moderately distinct; head suborbicular, rather abruptly narrowed at base, finely closely punctulate, the front broadly, feebly concave and subimpunctate; antennae not quite extending to the tips of the elytra, rather slender, feebly incrassate distally, the second joint longer than the third, the tenth as long as wide in the male, longer in the female; prothorax very nearly as long as wide, distinctly wider than the head, the sides broadly rounded anteriorly, thence very distinctly converging and nearly straight to the base, the surface strongly convex, broadly, feebly flattened along the middle, finely but closely, granularly and equally punctulate throughout in the female, evenly convex but feebly, transversely impressed before the base, with the punctulation finer, less dense and only distinctly granulose toward base in the male, the intervals smooth in both sexes; elytra about two-fifths wider and a third longer than the prothorax, the sides parallel and arcuate, the punctures asperulate, minute and rather sparse, the humeri narrowly exposed at base; hind tarsi slender, the basal joint

about as long as the next two combined in the male, the first four evenly decreasing in the female; sixth ventral of the male feebly sinuato-truncate, rounded in the female. Length 2.8 mm.; width 0.48 mm. New York (Ithaca and Catskill Mts.), Pennsylvania and Iowa.

americana n. sp.

Legs clear honey-yellow throughout, smaller species, the pronotum in the female generally distinctly impressed along the median line.......... 6

6 — Form very slender, more convex, the prothorax only very slightly wider than long, broadly rounded at the sides anteriorly and very distinctly narrowed thence to the base. Body blackish-piceous in color, the abdomen blacker, with the two basal segments rufous; antennae pale, fuscous toward tip. *Male* with the integuments polished and free from reticulation throughout; head finely punctulate throughout, not evidently impressed, rather abruptly constricted at the base, the antennae much shorter than usual, scarcely extending to basal third of the elytra, somewhat thick but only moderately incrassate distally, the second joint much longer than the third, the tenth barely as long as wide; prothorax very slightly wider than the head, convex, polished, minutely and closely punctulate, narrowly and very feebly, obsoletely impressed along the median line behind the middle; elytra nearly as long as wide, a third wider and two-fifths longer than the prothorax, finely, asperately and rather closely punctulate, with very narrowly exposed humeri; tarsi slender, the basal joint of the posterior as long as the next two combined; sixth ventral with a small angular emargination about twice as wide as deep. *Female* throughout proportioned nearly as in the male but with the surface of the head and pronotum very minutely, strongly reticulate and dull, the head somewhat deeply concave at the middle of the vertex, the pronotum very deeply and broadly concave along the median line throughout, the punctures of the impressed area very minute and only moderately close, those outside of the impression strongly asperate and dense; sixth ventral rounded at tip. Length 2.2 mm.; width 0.45 mm. North Carolina (Asheville).....**carolinae** n. sp.

Form less slender, the prothorax distinctly wider than long, broadly rounded at the sides anteriorly but only very slightly narrowed thence to the base, the sides just visibly converging........................ 7

7 — Head moderately developed, only slightly narrower than the prothorax.. 8

Head small, much narrower than the prothorax.......................... 9

8 — Color rufo-piceous, the abdomen black, the two basal segments rufous; antennae pale, slightly infuscate apically; integuments in the male polished and free from micro-reticulation throughout; vestiture not very conspicuous; head minutely, sparsely punctulate, not impressed; antennae feebly developed, extending to about basal third of the elytra, only slightly incrassate distally, the second joint as long as the first and much longer than the third, the subapical joints not as long as wide; prothorax about a fourth wider than long, not impressed at any point, the punctulation very fine and only moderately close-set, the interstices polished, not reticulate; elytra about a third wider and fully two-fifths longer than the prothorax, the punctulation feebly asperate and not very close, paler in color at apex; basal joint of the hind tarsi not quite as

long as the next two combined; sixth ventral with a very minute, rather shallow median sinus at tip; female not observed but having the pronotum deeply concave along the middle. Length 1.9 mm.; width 0.48 mm. Massachusetts..**cavicollis** Lec.

Color black, the elytra picescent but only feebly, indefinitely paler toward tip, the two basal ventrals rufescent; vestiture fine, close and rather distinct; head orbicular, not impressed, minutely punctulate and reticulate; antennae as in *cavicollis* but rather more incrassate distally, the subapical joints not as long as wide; prothorax barely a fifth wider than long, slightly though very evidently wider than the head as in *cavicollis*, minutely reticulate and dull, very minutely, closely punctulate, feebly so toward the middle, more coarsely and asperately toward the sides, the surface not impressed but only feebly flattened along the median line; elytra nearly as long as wide, a fourth wider and one-third longer than the prothorax, the humeri but slightly exposed, the surface polished, with less minute, sparser and more asperate punctures as usual, the suture minutely and feebly impressed behind the scutellum; tarsi very slender and filiform, the first joint of the posterior not quite as long as the next two combined; female with the sixth ventral rounded at tip; male not known. Length 1.9 mm.; width 0.42 mm. North Carolina (Asheville)..**obsoleta** n. sp.

9 — Lustre shining in the male, pale piceo-testaceous in color, the head and apical half of the abdomen black; antennae dusky toward tip; punctulation very minute, even, feebly granuliform and moderately close-set, asperulate and sparser on the elytra; pubescence not conspicuous; head rounded, scarcely impressed, the antennae rather short, slender, only slightly incrassate distally, barely as long as the head and prothorax, the second joint distinctly longer than the third, the tenth almost as long as wide; prothorax unusually large and transverse, about a third wider than long and a fourth wider than the head; apex not more than two-thirds as wide as the base, the surface barely perceptibly impressed along the middle from near the base to the centre of the disk; elytra nearly as long as wide, a fourth wider and nearly one-half longer than the prothorax, the humeri very narrowly exposed, the apex barely perceptibly paler in shade of color; tarsi very slender, the first joint of the posterior not quite as long as the next two together; sixth ventral with a very small but pronounced rounded sinus, about a fourth as wide as the segmental apex; female not at hand. Length 2.1 mm.; width 0.5 mm. Pennsylvania...................................**parviceps** n. sp.

Lustre of the head and pronotum dull in the female, elsewhere shining, piceous-black in color, the elytra less blackish, with a very narrow pale apical margin; two basal ventrals feebly rufescent; antennae red-brown, yellow toward base; punctures of the head and pronotum extremely minute, moderately close-set, of the elytra stronger and asperate; vestiture moderately distinct; head rounded, feebly impressed along the middle; antennae much longer than in *parviceps* or *cavicollis* and gradually, more distinctly incrassate distally, attaining basal third of the elytra, the second joint much elongated, slightly longer than the first or third, the tenth almost as long as wide; prothorax large but less transverse, about a fourth wider than long, finely reticulate and feebly alutaceous, the punctures everywhere minute and feeble; disk very broadly, rather feebly impressed along the middle in almost median third; elytra not quite as long as wide, about a third wider and longer than the prothorax, the humeri very narrowly exposed, the sides arcuate, the suture distinctly impressed behind the scutellum; hind tarsi fully four-fifths as long as the tibiae, with the basal joint unusually elongate, longer than the next two combined; sixth ventral evenly rounded at tip; male unknown. Length 2.5 mm.; width 0.65 mm.; North Carolina (Asheville)....................................**subalutacea** n. sp.

Lustre rather dull, the punctures fine and close-set throughout, the interstices on the pronotum not reticulate in the apparent female, blackish-piceous, the abdomen rufescent, blackish posteriorly, the elytra castaneous, gradually flavescent toward the apical margin, the antennae fusco-flavate throughout; head slightly elongate, the sides behind the eyes only feebly converging and arcuate; antennae shorter than usual, distinctly incrassate distally, but little longer than the head and prothorax, the second joint slightly longer and thicker than the third, the three subapical distinctly wider than long, the eleventh as long as the two preceding combined and thicker, obtusely rounded at tip; prothorax large, convex, nearly a fifth wider than long, broadly, feebly rounded at the sides and but little narrowed toward base, the surface evenly convex except a small and very feeble, transversely arcuate impression before the scutellum; elytra only very slightly wider than the prothorax and about a third longer, the sides parallel and arcuate, the humeri scarcely at all exposed at base; abdomen much narrower than the elytra, the sides only feebly converging toward base; legs but moderately slender. Length 2.5 mm.; width 0.61 mm. Missouri.
missouriana n. sp.

10 — Form moderately stout, strongly convex, piceous-black, the elytra piceo-testaceous, blackish toward base, the two basal ventrals feebly rufescent. *Male* with the head slightly though distinctly narrower than the prothorax, scarcely impressed, rather abruptly narrowed at base, very obsoletely subreticulate and scarcely perceptibly punctulate; antennae about attaining basal third of the elytra, only slightly incrassate distally, the second joint but slightly longer than the third, the ninth and tenth somewhat transverse, the former distinctly the shorter of the two; prothorax only very slightly wider than long, the sides subparallel and feebly arcuate, the apex almost as wide as the base, the surface strongly convex, minutely, closely and subgranularly punctulate throughout, with smooth polished interspaces, the median line very finely and obsoletely impressed toward base; elytra fully two-fifths wider and longer than the prothorax, scarcely visibly and broadly impressed behind the scutellum, minutely, rather closely, asperulately punctulate, the humeri somewhat well exposed; abdomen excessively minutely, densely punctulate and finely, closely pubescent, the hairs closely decumbent; hind tarsi with the first joint almost as long as the next two combined; sixth ventral with a very small shallow subparabolic sinus, about four times as wide as deep. *Female* nearly similar in general form, the head notably smaller, feebly impressed along the middle; antennae and tarsi nearly similar; prothorax larger and much more

transverse, a fourth wider than long, very much wider than the head, the surface duller because of a very minute close-set reticulation, similarly densely but less distinctly punctulate, very broadly flattened along the middle, with the median line less broadly and very feebly impressed; sixth ventral rounded behind. Length 2.6 mm.; width 0.58 mm. New York (Catskill Mts.), — H. H. Smith...**pruinosa** n. sp.

Form nearly as in *pruinosa*, the coloration and lustre similar, except that the elytra are blacker throughout, with a wider, abruptly pale apical margin. *Female* with the head as in *pruinosa*, almost imperceptibly punctulate and scarcely impressed, the antennae extending to the middle of the elytra, very slender and extremely feebly incrassate distally, the second and third joints subequal in length, the latter much the narrower at base, ninth and tenth subequal in length, the former somewhat elongate, the latter fully as long as wide; prothorax less transverse than in the female of *pruinosa*, a fifth or sixth wider than long, distinctly wider than the head, alutaceous, minutely reticulate, also finely and closely, granularly punctulate throughout, more strongly than in *pruinosa*, almost evenly convex throughout, the median line very obsoletely and not broadly impressed; sides broadly rounded anteriorly, thence distinctly converging to the base, which is distinctly wider than the apex; elytra nearly as in *pruinosa;* hind tarsi very slender and filiform, fully four-fifths as long as the tibiae, with the basal joint much elongated but not as long as the next two combined; sixth ventral evenly rounded at tip; male not at hand. Length 2.6 mm.; width 0.6 mm. North Dakota (Williston),— H. F. Wickham....**dakotana** n. sp.

Form very slender, linear, convex, pruinose, black, the elytra but slightly picescent, with a very fine abrupt pale apical margin. *Male* with the head small, orbicular, very convex, not at all impressed, almost imperceptibly and not densely punctulate; antennae extending almost to the middle of the elytra, very slender and only slightly incrassate distally, the second joint much longer than the third, the ninth and tenth not quite as long as wide, the former somewhat the shorter; prothorax about a fifth wider than long, much wider than the head, the sides evenly, circularly arcuate anteriorly and rounding to the apex, which is much narrower than the base, feebly converging and nearly straight from a little before the middle to the base; surface broadly, evenly convex, finely, asperulately, closely and evenly punctulate, with the interstices smooth and polished, the median parts not impressed; elytra fully two-fifths wider and longer than the prothorax, very obsoletely impressed on the suture behind the scutellum, finely, closely and asperulately punctulate, the humeri moderately exposed and rounded, the sides parallel and broadly arcuate; hind tarsi filiform but much shorter than the tibiae, with the basal joint about as long as the next two together; sixth ventral with a rather large triangular and acutely angulate notch nearly as deep as wide; female unknown. Length 2.5 mm.; width 0.42 mm. Missouri (St. Louis — Creve Coeur Lake), — G. W. Bock...**illini** n. sp.

11 — Form moderately slender, rather depressed. *Male* shining throughout, not at all reticulate, the head and posterior half of the abdomen black, the prothorax and elytra piceous-brown, the latter with the

humeri and apex flavate; two basal ventrals bright red, the legs pale honey-yellow, the antennae fuscous, pale toward base; pubescence not conspicuous; head rounded, polished, scarcely perceptibly punctulate, not impressed, antennae nearly attaining the middle of the elytra, moderately incrassate distally, the second joint evidently longer than the third, the subapical joints not quite as long as wide; prothorax rather small, a fifth wider than long, very slightly wider than the head, the sides broadly, evenly rounded anteriorly to the apex, which is much narrower than the base, and feebly convergent and nearly straight from before the middle to the base; surface almost evenly convex, not impressed along the median line but with a very small and feeble rounded impression before the middle of the base; punctulation extremely minute and not very close; elytra about two-fifths wider and longer than the prothorax, finely but closely, asperately punctulate, the humeri rather well exposed; abdomen nearly parallel, much narrower than the elytra but unusually little narrowed from near the apex to the base; hind tarsi much shorter than the tibiae, the basal joint about as long as the next two together; sixth ventral with a small and rather shallow, subangulate emargination at tip. *Female* not at hand. Length 2.7 mm.; width 0.6 mm. Texas (Del Rio), — H. F. Wickham...**ornatella** n. sp.

Form slightly more slender, much more convex, the prothorax relatively much larger and the abdomen very much more strongly narrowed toward base, feebly shining; prothorax and two basal ventrals pale, the head and elytra throughout dark rufo-piceous, the remainder of the abdomen black; legs pale honey-yellow, the antennae fuscous, pale basally; punctures minute and very close-set throughout, subgranuliform on the head and pronotum, the interstices polished on the latter, asperate on the elytra, excessively minute throughout on the abdomen except in the basal depressions; pubescence very close, pale throughout, giving a pruinose effect. *Male* with the head moderate, obliquely and rapidly narrowed at base, convex, not impressed, the antennae short, feebly incrassate, but little longer than the head and prothorax, the three basal joints rapidly diminishing in length, the subapical scarcely as long as wide; prothorax about a fifth wider than long, distinctly wider than the head, the sides rounded anteriorly, thence just visibly converging and broadly, feebly sinuate to the base, convex, scarcely perceptibly and narrowly impressed along the median line posteriorly; elytra nearly as long as wide, convex, about a fourth wider and longer than the prothorax, narrowly impressed on the suture behind the scutellum, the humeri very narrowly exposed; legs very slender, the basal joint of the hind tarsi much elongated though scarcely as long as the next two combined; sixth ventral very broadly and feebly sinuate at tip. *Female* resembling the male in size, coloration, general form, sculpture and vestiture but with the head relatively slightly smaller and the prothorax somewhat shorter and more transverse, both finely reticulate in addition to the punctures and consequently slightly duller in lustre, the latter broadly and deeply impressed along the median line, except at apex and more briefly at base, the sixth ventral broadly rounded at tip. Length 2.4 mm.; width 0.52 mm. California (Yuma)..**arida** n. sp.

12 — Form rather slender, convex, linear, shining, black, the prothorax and first two ventrals dark piceo-rufous; legs and antennae piceous, the basal joint of the latter and the tarsi paler; punctures fine, asperate, only moderately close-set, on the anterior parts excessively minute, on the abdomen dense but less so on the first two tergites; pubescence fine and close but not conspicuous. *Female* with the head rather small, abruptly narrowed at base, the antennae extending to the middle of the elytra, gradually and strongly incrassate distally, the second and third joints much elongated and equal, the subapical joints not quite as long as wide; prothorax much wider than the head but only just visibly wider than long, the sides broadly rounded at apex, thence feebly converging and nearly straight to the base, convex, the punctular interstices polished, not reticulate, broadly, feebly impressed along the middle except at apex, the latter but little more than two-thirds as wide as the base; elytra distinctly wider than long, fully two-fifths wider but scarcely more than a third longer than the prothorax, with an oval sutural impression behind the scutellum, the humeri rather narrowly exposed, rounded; hind tarsi nearly four-fifths as long as the tibiae, the basal joint about as long as the next two combined; sixth ventral broadly rounded at tip; mesosternal process about attaining the metasternum but rather wider than usual, obtusely rounded at tip. *Male* not known. Length 2.4–2.7 mm.; width 0.52–0.6 mm. California (Siskiyou, Napa and Sta. Clara Cos.) .... **faceta** Csy.

Form relatively rather broader and less convex than in *faceta*, smaller in size, the antennae, tarsi and mesosternal process similar, rather shining, somewhat pale piceo-rufous, the head and posterior part of the abdomen black; elytra with a fine pale apical margin, the legs and antennae toward base pale testaceous, the latter infuscate distally; pubescence and punctuation nearly as in *faceta*, the asperulate punctures of the pronotum stronger, the very minute punctulation of the abdomen less close-set. *Female* with the head smaller, orbicular, more gradually and arcuately narrowed toward base; prothorax shorter and more transverse, nearly a fourth wider than long and very much wider than the head, the sides rather more strongly rounded anteriorly and thence more strongly converging and nearly straight to the base, the surface moderately convex, very obsoletely and much more narrowly impressed along the median line, unimpressed in apical third; elytra nearly similar to those of *faceta;* sixth ventral rounded at tip. *Male* not at hand. Length 2.35 mm.; width 0.5 mm. California (Los Angeles Co.), — H. C. Fall .... **vespertina** n. sp.

In addition to the above species, which are wholly congeneric with such European types as *constricta*, *coarctata* and *ferealis*, of Erichson, and which may be regarded as representing the true *Tachyusa*, I have before me certain aberrant species forming subgeneric groups of the present genus; these, with the types upon which they are founded, may be briefly indicated as follows:—

General form as in *Tachyusa* but rather stouter, the middle coxae not so closely approximate and with the obtuse but free mesosternal process separated from the rounded projection of the metasternum by a transversely convex and undepressed connecting isthmus; three basal tergites equally deeply impressed at base and coarsely punctured, the punctures transversely crowded, forming fine longitudinal carinae as in *Tachyusa* but without trace of the medial carina of that genus; tarsal claws fully as long and slender but with those of the hind tarsi unequal in length, the inner claw the shorter. Europe. [Type *Tachyusa balteata* Er.]. **Tachyusilla** n. subgen.

General form and habitus as in *Tachyusa* but with the middle coxae rather less approximate than in the typical forms of that genus, the mesosternal process rather shorter, obtusely rounded at tip, free but nearly or practically attaining the metasternal projection, which is obtusely subtruncate, not flat in a longitudinal direction as in *Tachyusa* but longitudinally concave, the concavity extending as far as the posterior limits of the acetabula, the latter very feebly closed behind; three basal tergites impressed in base as in *Tachyusa* and even more broadly, the coarse punctures not forming longitudinal acute rugae but polygonally and irregularly crowded, without trace of the characteristic medial carina of *Tachyusa;* tarsal claws much shorter than in *Tachyusa* or *Tachyusilla*, those of the hind tarsi equal. South Africa. [Type *T. gemma** Csy.]................................ ....**Tachyusota** n. subgen.

There is considerable variety in the form of the mesosternal process in *Tachyusa*, as well as in *Euliusa* and other genera of this subtribe, and any statements concerning it are to be taken in a comprehensive sense; it is more constant in relative length and in the approximation of its tip to the apex of the metasternal projection than it is in width, most of the species having the tip acute, but in some, such as *smithi*, *gracillima*, *faceta* and *vespertina*, of America, it becomes wider and obtuse at tip, and, in the European *ferealis* it is remarkably wide for *Tachyusa* and obtuse at tip, though fully attaining the metasternum without an intervening isthmus.

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* This species may be described as follows from the male:—

Form slender, strongly convex, highly polished throughout, pale rufo-testaceous, the head and the abdomen toward tip black; legs testaceous, the antennae slightly infuscate distally; punctures very minute, asperulate, very sparse, except toward the middle of the pronotum basally and toward the scutellum on the elytra, where they are more close-set; abdomen subimpunctate, the fourth and fifth segments finely but not densely punctate throughout; pubescence not conspicuous; head small, orbicular; antennae rather short, barely attaining basal third of the elytra, rather distinctly incrassate distally, the second joint longer and thicker than the third; prothorax fully as long as wide, scarcely as wide as the head, the sides subangulate anteriorly, thence moderately converging and broadly sinuate to the base, not impressed; elytra large, quadrate, moderately produced posteriorly at the sides, fully four-fifths wider and about two-fifths longer than the prothorax, with a small sutural impression at base, convex, the sides arcuate, the humeri rather widely exposed but rounded; abdomen much narrowed toward base, clavate, very much narrower than the elytra, the first three segments constituting fully three-fourths of its length; legs slender, the basal joint of the hind tarsi as long as the next two combined; sixth ventral with a small, feeble, broadly rounded sinus at tip; female nearly similar to the male. Length 2.15 mm.; width 0.43 mm. South Africa (Wellington)...............................**gemma** n. sp.

Gnypetella n. gen.

The very small frail species of this genus recall the more elongate linear forms of *Gnypeta* in general form, but have the middle coxae very approximate, with their acetabula open behind and not closed by a fine beaded edge, the mesosternal process finely acute, free and extending to the middle of the acetabula, where it is separated from the obtuse apex of the short metasternal projection by a very long, narrow, transversely convex isthmus, which is not at all depressed but separated from the metasternum by a subobliterated transverse suture, distinguishable principally by differences in sculpture, the isthmus being wholly punctureless and highly polished. The transverse, elevated, posteriorly rounded plate at the anterior limit of the mesosternum, generally so conspicuous in the Tachyusae and Falagriae, is rather less developed here than usual. The eyes are unusually small, anterior and not prominent, the neck less than half as wide as the head, the elytra slightly angulate posteriorly at the sides and the hind tarsi much shorter than the tibiae, though with the basal joint unusually elongate and longer than the next two combined. The only two species known thus far may be described as follows: —

Form slender, parallel, moderately convex, polished, pale brownish-testaceous throughout, the abdomen blackish except toward base; punctures of the head and pronotum extremely minute, rather sparse, broadly wanting toward the middle of the former, the elytra more strongly, asperately but not very densely punctured, the abdomen finely, moderately sparsely, the basal impressions somewhat coarsely but not very

densely punctate; pubescence inconspicuous; head large, wider than long, broadly arcuato-truncate at base, the sides parallel, the angles narrowly rounded; antennae short, stout, scarcely longer than the head and prothorax, the first three joints rapidly diminishing in length, the outer joints compact and rather strongly transverse; prothorax about as wide as the head, slightly transverse, the sides broadly rounded anteriorly, thence feebly convergent and less arcuate to the base, the surface with a very small transverse impression before the middle of the base, the latter moderately arcuate; elytra slightly transverse, about two-fifths wider and longer than the prothorax, the suture feebly and broadly impressed in basal three-fifths; humeri somewhat well exposed, slightly rounded; abdomen parallel, distinctly narrower than the elytra but wider than the prothorax, the sides of the fifth ventral converging posteriorly; legs slender; sixth ventral of the female evenly rounded at tip, the male unknown. Length 1.9 mm.; width 0.42 mm. California (Monterey Co.). [= *Tachyusa lat.* Csy.].
laticeps Csy.

Form and coloration nearly similar, the anterior parts and legs rather darker, the abdomen black throughout, almost similarly sculptured, shining; head smaller, but slightly wider than long, similarly arcuato-truncate at base, the antennae nearly similar, but little longer than the head and prothorax, the outer joints still more strongly transverse, compact; prothorax rather more transverse, somewhat wider than the head, the sides much more narrowly rounded anteriorly, thence converging and straighter to the base, the short transverse impression before the scutellum similar; elytra similar in form, with the humeri equally exposed, the impression on the suture behind the scutellum very much shorter, oval; abdomen nearly similar but somewhat broader, the coarse punctuation of the short, deep, transversely linear basal impressions somewhat coarser and closer; sixth ventral of the female broadly, subparabolically rounded at tip, the male not at hand. Length 1.75 mm.; width 0.4 mm. California (Los Angeles Co.).
placidula n. sp.

These species are apparently rare and I have at present before me only a single example of each.

Euliusa n. gen.

In general form and facies this genus resembles *Gnypeta* and it is undoubtedly closely allied, the intermesocoxal structure being much the same, a short isthmus separating the rather short and in general obtusely truncate free tip of the mesosternal process from the metasternal projection, but, posteriorly, there is no trace of the circumambient beaded edge delimiting the acetabula, so well developed and constant in *Gnypeta*. The sculpture is always very feeble and there is but little diversity in structural characters throughout the genus. The punctures are very minute as a rule and everywhere sparse, the surface highly lustrous, the vestiture rather inconspicuous, the head well developed, with the eyes moderately large in size and somewhat prominent, the antennae slender, with the first three joints elongate, the subapical about as long as wide and the second and third equal or subequal; the neck is from one-half to two-thirds as wide as the head. The prothorax is obtrapezoidal, wider than long, with the hind angles more than right but well marked and not in the least rounded; the elytra are well developed, with very broadly exposed humeri and are but slightly and obtusely produced posteriorly at the sides. The abdomen is broad and rather short, with the first three tergites narrowly but deeply, rectilinearly impressed at base, the impressions subimpunctate, having generally a very few widely and irregularly scattered coarser but feeble punctures. The legs are long and slender, the hind tarsi filiform, with the basal joint usually fully as long as the next two combined and longer than in typical *Gnypeta*. The male sexual characters are virtually uniform throughout and consist of a broadly rounded, very shallow sinuation at the tip of the sixth ventral plate. As in *Tachyusa*, the pronotum is generally impressed along the middle posteriorly in the female and evenly convex in the male, but, in both sexes, there is a short transverse and frequently bifoveate impression before the base, as is generally the case in *Gnypeta*. The genus appears to be local in distribution and confined as far as known to southern California, extending eastward into Arizona. The characters given above being so uniform, no further mention of them will be made, except in certain cases, in the descriptions of the following nine species: —

Abdomen elliptical in form, widest in the middle and much narrowed at base and apex, the sides evenly arcuate....................................2

Abdomen parallel or very nearly so, the sides of the fifth segment moderately converging from base to apex....................................3

2 — Form rather stout, blackish-piceous in color, the head and entire abdomen black, the legs and antennae pale; head orbicular, rapidly and arcuately narrowed behind the eyes, the punctures larger and

denser than usual but feeble, the median line broadly impunctate; vertex with a deep rounded impression; antennae moderately incrassate distally; prothorax somewhat wider than the head, about a fourth wider than long, the sides obtusely angulate anteriorly, thence rather strongly converging and broadly sinuate to the base, the surface very minutely, sparsely punctulate, narrowly and very obsoletely impressed on the median line behind the centre, the transverse impression large and conspicuous, deeply bifoveate; elytra transverse, about two-thirds wider and a third longer than the prothorax, very sparsely punctulate and convex; abdomen, at the middle, scarcely as wide as the elytra, at base and apex very much narrower; male not at hand. Length 3.2 mm; width 0.78 mm. Arizona....................**majuscula** n. sp.

Form still stouter, piceous-black throughout, the legs and antennae testaceous; punctures very minute and sparse on the head and throughout as usual, those of the abdomen asperulate; pubescence very sparse but rather coarse and pale ashy in color; head somewhat wider than long, the sides behind the prominent eyes parallel for a short distance, then strongly rounded to the neck, the rounded impression of the vertex smaller and feebler than in the preceding species; antennae extending to apical third of the elytra, slender, only moderately incrassate distally, the subapical joints perceptibly shorter than wide; prothorax scarcely wider than the head, about a fifth wider than long, strongly convex, the sides broadly rounded anteriorly, thence moderately converging and straight to the base, the basal impression obscurely and irregularly bi-impressed, the median line impressed for a short distance anteriorly from the transverse impression; elytra strongly transverse, two-thirds wider and two-fifths longer than the prothorax, the humeri very widely exposed, the suture impressed behind the scutellum; abdomen less strongly elliptical than in *majuscula*, in the middle much narrower than the elytra; female not known. Length 2.75 mm.; width 0.75 mm. California (Los Angeles Co.),—H. C. Fall..**sparsella** n. sp.

3 — Prothorax distinctly transverse; body stout in form throughout......4

Prothorax barely perceptibly wider than long; form somewhat less stout..8

4 — Punctures of the head larger, more approximate and much more conspicuous though impressed and not very deep. Body black, with a slight piceous tinge throughout, the legs and antennae very slender, pale piceo-testaceous; vestiture pale in color; head wider than long, impunctate along the middle, the vertex with a large rounded impression; eyes small; antennae extending to the middle of the elytra, rather strongly incrassate distally, the ninth joint fully as long as wide, the tenth nearly so; prothorax just visibly wider than the head, nearly a fourth wider than long, the sides anteriorly narrowly rounded and prominent, thence rather strongly convergent and broadly sinuate to the base, the surface minutely and almost imperceptibly punctulate as usual, strongly impressed along the middle from apical third, the transverse impression small and feeble; elytra nearly as in *sparsella*, the humeri equally widely exposed, the punctulation almost invisible, the suture narrowly and deeply impressed behind the scutellum; abdomen broad though distinctly narrower than the elytra, the sides

nearly straight and parallel, the punctulation extremely minute, sparse and not asperulate; male not at hand. Length 2.5 mm.; width 0.68 mm. California (Los Angeles Co.— Pasadena),— A. Fenyes. [= *Gnypeta luc.* Bern.]..**lucens** Bernh.

Punctures of the head and remainder of the body sparse and extremely minute as usual 5

5 — Color piceous-black, the abdomen feebly rufescent toward base, the legs and antennae testaceous, the latter infuscate distally. Head but little wider than long, the sides subparallel for a short distance behind the eyes, then strongly and obliquely rounded to the neck, the impression of the vertex very small; antennae shorter than usual, extending scarcely to the middle of the elytra, rather incrassate distally, the joints seven to ten shorter than wide; prothorax barely perceptibly wider than the head, the outline and punctulation as in *lucens*, the surface not at all impressed along the middle, the subbasal impression small, with two unusually approximate foveae; elytra two-thirds wider and a third longer than the prothorax, the humeri widely exposed as usual, the suture strongly impressed behind the scutellum; abdomen parallel, the sides straight, converging at tip as usual, very minutely, sparsely punctulate toward base, less minutely, more closely and asperulately toward tip; female not known. Length 2.75 mm.; width 0.7 mm. California (Riverside Co.)............**elsinorica** n. sp.

Color more or less pale piceo-testaceous, the head and apical parts of the abdomen darker testaceous to blackish; legs pale testaceous, the antennae sometimes infuscate distally.................................. 6

6 — Form very stout. Head and about apical half of the abdomen blackish, the remainder dark piceo-testaceous; antennae pale, gradually infuscate distally, extending to about basal third of the elytra, moderately incrassate distally, the ninth and tenth joints slightly shorter than wide; punctures throughout very minute and sparse, closer posterior to the three basal segments of the abdomen but not evidently asperulate; head moderate, the sides converging and almost evenly arcuate from the eyes to the neck; prothorax about a fifth wider than long, very slightly wider than the head, the sides subprominently rounded anteriorly, thence only feebly converging but rather deeply sinuate to the base, the median line not impressed, the subbasal impression moderately large, broadly impressed, not definitely bifoveate; elytra short and strongly transverse, about three-fifths wider and a third longer than the prothorax, with the humeri very widely exposed; abdomen nearly as wide as the elytra, the sides parallel; hind tarsi two-thirds as long as the tibiae; female unknown. Length 2.7 mm.; width 0.8 mm. California (Los Angeles Co.)........**transversa** n. sp.

Form less stout, the abdomen always much narrower than the elytra..... 7

7 — Head and elytra dark, the prothorax and basal half of the abdomen pale, piceo-testaceous, the remainder of the latter blackish; antennae pale, only slightly infumate distally; punctures throughout very minute and sparse, not asperate and moderately close toward tip of the abdomen; vestiture pale but inconspicuous; head rather large, wider than long, somewhat wider than the prothorax in the male, as wide as the latter in the female, the impression of the vertex very feeble; eyes

prominent, the sides behind them feebly converging for a short distance, then strongly rounded to the neck; antennae attaining basal two-fifths of the elytra, rather strongly incrassate distally, the subapical joints not quite as long as wide; prothorax about a fifth wider than long, the sides rather prominently rounded anteriorly, thence only feebly converging but broadly, somewhat strongly sinuate to the base, the subbasal impression rather large and deep, strongly and not very approximately bifoveate, the median line very narrowly and obsoletely subimpressed behind apical third in the male, more broadly and distinctly impressed in the female; elytra moderately transverse, three-fifths wider and two-fifths longer than the prothorax, somewhat less transverse in the female, the humeri broadly exposed; abdomen a third wider than the prothorax; male with the sixth ventral feebly sinuate at tip as usual. Length 2.5 mm.; width 0.7 mm. California (Sta. Clara Co.). [=*Falagria lat.* Csy.] .... **laticollis** Csy.

Head piceous, the prothorax pale, the elytra scarcely darker, piceo-testaceous, the abdomen pale, blackish toward tip; antennae scarcely infuscate distally, unusually long, fully attaining apical third of the elytra, distinctly incrassate distally, the ninth joint as long as wide, the tenth very nearly so; punctures minute and sparse throughout, those of the abdomen slightly asperulate toward tip; head orbicular, parallel behind the eyes for a short distance, then obliquely arcuate to the neck, the vertex with a deep rounded medial impression; prothorax barely a sixth wider than long, equal in width to the head, the outline nearly as in *laticollis* but rather more broadly rounded at the sides anteriorly, the median line broadly and strongly impressed in basal three-fifths, the subbasal impression nearly obliterated, forming the basal part of the medial impression; elytra three-fourths wider and nearly one-half longer than the prothorax, the humeri very widely exposed as usual; abdomen unusually narrow, barely a fourth wider than the prothorax, parallel and straight at the sides, slightly narrowing toward tip; legs very slender, the hind tarsi fully three-fourths as long as the tibiae, the basal joint distinctly shorter than the next two combined; claws long slender and equal as usual; male not at hand. Length 2.3 mm.; width 0.7 mm. California (Los Angeles Co.) .... **mollis** n. sp.

Head and elytra rather dark, the prothorax and anterior half of the abdomen pale, brownish-testaceous, the remainder of the abdomen blackish; antennae slightly infumate distally, somewhat short, rather feebly incrassate distally, scarcely extending beyond basal third of the elytra, the four subapical joints slightly shorter than wide; head slightly wider than long, the sides subparallel behind the eyes for a short distance, then strongly, obliquely rounded to the neck, the vertex scarcely impressed in the male, feebly so in the female; prothorax equal in width to the head in the former, slightly wider in the latter, a fifth wider than long, the sides prominently rounded anteriorly, thence moderately converging and broadly sinuate to the base, nearly similar in the sexes and with a large, strongly impressed bifoveolate antebasal impression which becomes angularly obsolete anteriorly; elytra transverse, much wider and longer than the prothorax, with broadly exposed humeri; abdomen parallel, narrowed slightly at tip, two-fifths or more wider than the prothorax in the male but only about a fifth wider than the latter in the female, the male larger as a rule and stouter throughout; mesosternal process somewhat narrower than usual but not acute. Length 2.3–3.0 mm.; width 0.68–0.7 mm. Arizona (Tuçson and Riverside................................**pimalis** n. sp.

8 — Form only moderately stout, blackish-piceous in color, the prothorax slightly paler, the antennae infuscate distally; punctures very minute and sparse throughout; head orbicular, convex, as long as wide, the sides strongly arcuate and converging behind the eyes, with a very small rounded impression at the middle of the vertex in the male which becomes much larger and deeper in the female; antennae extending to the middle of the elytra, distinctly incrassate distally, the two subapical joints slightly shorter than wide; prothorax not quite as wide as the head in either sex, scarcely visibly wider than long, the sides rounded anteriorly, thence rather distinctly converging and feebly sinuate to the base, the surface convex, wholly unimpressed except the distinct bifoveate transverse impression before the scutellum in the male, somewhat deeply impressed along the median line from apical two-fifths to the transverse impression in the female; elytra two-thirds wider and a third longer than the prothorax; abdomen similar in the sexes, parallel, distinctly narrower than the elytra; basal joint of the hind tarsi rather longer than the next two combined. Length 2.6 mm.; width 0.65 mm. California (Los Angeles Co.)............**citrina** n. sp.

A single specimen of *lucens* Bernh., was very kindly given me by Dr. Fenyes. The species is very readily distinguishable by the unusually large and more close-set punctures of the head, this also being a distinctive character in *majuscula;* the mesosternal process of the latter is more acute at tip than in any other species that I have observed but is approached in this respect to some extent by *pimalis*, which is a common form, widely distributed over the more arid parts of Arizona. The abdomen in *pimalis* appears to be notably narrower in the female than in the male, and the same peculiarity may affect *mollis*, which is now represented in my cabinet by a single female having a notably narrow abdomen, but I have not observed this rather remarkable character elsewhere in the genus and it is certainly not true of *laticollis*, although there, as generally in the genus, the male is a trifle stouter than the female. This seems to occur frequently in the Staphlinidae and may be a general rule.

Meronera Shp.

This genus resembles the preceding somewhat in outline but is composed of very much more minute species, having strong and rather close-set punctures on the head and pronotum and the hind angles of the prothorax somewhat broadly rounded, differing in this way from any *Euliusa*, *Gnypetella* or *Gnypeta*, excepting the subgenus *Gnypetoma*, which is really entitled to full generic rank in all probability. It more closely resembles the genus *Neolara* Shp., where the sculpture is in general similar, the basal angles of the prothorax very obtuse and blunt, but not so distinctly rounded and the intermesocoxal parts similar, but it differs wholly from *Neolara* in the structure of the prosternum before the coxae as stated in the table. The head is nearly as in *Gnypetella*, broadly arcuato-truncate at base, with distinct rounded angles and the eyes are almost as small as in that genus but much more prominent. The neck is much narrower and the antennae are longer than in any of the allied genera, with all the joints elongate, the first much longer than the second or third, the latter being more or less appreciably longer than the second. The elytra are obliquely truncate at apex rounded but not at all produced at the sides of the apex, in the manner observed in *Tachyusa* and less evidently in *Gnypeta*. The abdomen is wide, parallel and almost evenly arcuate at the sides, with the first three tergites narrowly, rectilinearly and more or less feebly impressed at base, the impressions impunctate. The short and broadly truncate mesosternal process is not at all free as it is in *Gnypeta*, *Tachyusa* or *Euliusa*, but is attached by a declining isthmus to the somewhat depressed apex of the long metasternal projection, the structure being almost similar to that of *Neolara*. The legs are long and very slender, the hind tarsi very slender and filiform, about as long as the tibiae, with the basal joint a little longer than the next two combined. We have only the following three species so far as noted: —

Elytra subparallel, longer than the prothorax..........................2
Elytra with the sides strongly diverging from base to apex, shorter than the prothorax..3
2 — Form stout, subparallel, convex, shining, the head, and, to a less degree the elytra and the last two or three abdominal segments, piceous to blackish, the prothorax, basal parts of the abdomen, elytral base,

broadly toward the humeri, legs and basal parts of the antennae, more or less pale testaceous; punctures of the head and pronotum rounded, umbilicate, coarse and very close-set, those of the elytra not quite so coarse and less dense, of the abdomen fine, sparse and asperulate, the ground sculpture finely and feebly reticulate in subtransverse lines, of the elytra finely and obsoletely subreticulate, elsewhere smooth; vestiture fine, rather sparse and wholly inconspicuous, each abdominal segment with a transverse series of four coarse erect black setae; head wider than long, fully as wide as the prothorax, convex, unimpressed; antennae distinctly incrassate distally, extending rather beyond the elytral apex; prothorax obtrapezoidal, only very slightly wider than long, the sides prominently rounded at apical third, thence distinctly converging and sinuate to the base, the surface convex, unimpressed in either sex; elytra each with a black seta near the middle of the base, about one-half wider and but slightly longer than the prothorax, the the humeri widely exposed; abdomen parallel, with the sides evidently and evenly arcuate, distinctly wider at the middle than the elytra in the male, much narrower than the elytra and with the sides straighter in the female; sixth ventral of the male with arcuately converging sides, the obtuse apex with a small and broadly, evenly rounded sinus about five or six times as wide as deep; female distinctly more slender than the male throughout the body. Length 1.65–1.8 mm.; width 0.4–0.45 mm. Rhode Island, New York and North Carolina (Asheville) to Iowa. [=*Falagria venus.* Er.]................................**venustula** Er.

Form nearly similar to *venustula,* polished, rufo-piceous, the prothorax somewhat paler, the abdomen black, the first two segments, elytral base and humeri, legs and basal parts of the antennae more or less pale flavate; femora piceous, paler toward base; antennae infuscate distally; punctures of the head and pronotum less coarse, more impressed and much less close-set than in *venustula,* those of the pronotum not umbilicate, the elytra not at all reticulate, having rather strong and moderately sparse punctures, somewhat smaller than those of the anterior parts, the abdomen finely, transversely reticulate, finely and sparsely punctulate; pubescence inconspicuous; prothorax similar to that of *venustula* but somewhat narrower than the head, especially in the male; elytra three-fifths wider and nearly a third longer than the prothorax, the humeri widely exposed; abdomen parallel, with feebly and evenly arcuate sides, fully as wide as the elytra in the male and nearly as wide in the female; sixth ventral of the male nearly as in the preceding, the broadly and circularly rounded sinus about six times as wide as deep; female but slightly more slender than the male, with the sixth ventral rather strongly and evenly rounded at tip. Length 1.8 mm.; width 0.48 mm. Texas (El Paso) to Utah (Provo.)...........**montana** n. sp.

3 — Body rather slender, polished, similar in sculpture, punctuation and vestiture to *venustula,* the coloration similarly disposed throughout but paler in every part, perhaps from immaturity; prothorax fully as long as wide and as wide as the head, the sides angulate, more obliquely, arcuately rounded anteriorly from apical two-fifths to the neck, otherwise as in *venustula,* the median line narrowly and obsoletely impressed behind the middle, the impression not attaining the base; elytra strongly

transverse, distinctly shorter than the prothorax, the apices much more oblique than in *venustula*, the punctures less close-set; abdomen similarly parallel with arcuate sides, about as wide as the elytra in the male, the sixth ventral in that sex obtuse and feebly sinuate as in *venustula*, the sinus about a third as wide as the apex and very shallow. Length 2.0 mm.; width 0.43 mm. New York (Catskill Mts.), — H. H. Smith.

obliqua n. sp.

It will be noticed that the feeble and broadly rounded sinus of the sixth ventral is almost exactly similar to that of the genus *Euliusa*, and that the narrower form of the female and especially the narrower abdomen of the latter sex, is also a peculiarity noted in several species of that genus. *Obliqua* is represented by a single specimen, but it certainly differs very much from *venustula* in the form as well as in the abbreviation of the elytra, and very noticeably in the form of the prothorax. I have assumed *venustula* as the type of *Meronera*, as it was assigned to that genus by its founder, and was the first species described. It is abundant throughout the northern Atlantic regions.

Subtribe **Falagriae**.

The Falagriae differ from the Tachyusae in having the prosternum under the coxae corneous and not membranous. This chitinous lining is not a posterior extension of the ante-coxal part of the prosternum, but is composed of two plates that take their origin at the sides posteriorly, beginning as small plates surrounding the spiracles. These plates develop inwardly and finally meet on the median line. They are very variable in extent in the several genera, usually complete, meeting on the median line and extending to the ante-coxal part, in such cases wholly protecting the membrane so largely exposed in the Tachyusae, but, in other genera, they may not quite meet throughout on the median line, their rounded internal margins leaving a triangular piece of exposed membrane adjoining the ante-coxal part of the prosternum, and, in one genus, the plates are very small, leaving most of the membrane exposed. The Pacific coast fauna is very poor in representatives of the Falagriae, and it is remarkable that in the only two genera that do occur there, the subcoxal plates are incomplete as well as imperfectly chitinized.

The Falagriae are very small beetles as a rule, of slender and graceful form, with much narrower neck than in the Tachyusae, long and generally slender legs with filiform tarsi, the posterior usually having a greatly elongate basal joint, and the pronotum is always narrowly and acutely impressed along the median line, sometimes broadly, deeply and conspicuously but in other genera very feebly or obsoletely. The singular sexual differences in the pronotal impression, and sometimes in sculpture as well, prevailing in some of the genera of the Tachyusae, are apparently not observable in the Falagriae, but there are some analogous though very feeble characters at the apex of the sixth ventral plate, so slight however that they will not be noticed in the descriptions of the species except in certain instances. The first three tergites are rectilinearly impressed at base, but there is never a trace of the carina so developed in *Tachyusa*, and the abdomen is always rather wide, parallel and never narrowed toward base as it is in some of the genera of the preceding subtribe; the elytra, also, are never more than very feebly produced or subangulate at the sides of the apex. The genera may be defined as follows: —

Flanks of the pronotum broadly convex and strongly inflexed, narrowing the prosternum, the hypomera not delimited from the flanks; middle acetabula more or less well defined throughout by a beaded edge; prosternum wholly corneous under the coxae 2

Flanks feebly inflexed, the prosternum normally broad, the hypomera delimited at the sides, usually but not always by a beaded edge; middle acetabula always widely open behind, never having a trace of beaded edge; mesosternum never carinate 3

2 — Middle acetabula well separated, surrounded throughout by a fine strong beaded edge, deep, with abruptly steep walls throughout, the mesosternum elevated in median third, more strongly anteriorly, the surface perfectly flat and without trace of carina, the process very short, not extending much beyond anterior fourth of the acetabula, squarely truncate at tip, the latter not in the least free but joined to the longer and equally wide, flat and transversely truncate tip of the metasternal projection by a short flat isthmus on the same level as the apices; prosternum before the coxae defined externally and internally by similar posteriorly cusped beaded edges; neck nearly a third as wide as the head, the latter arcuato-truncate at base with evident angles, the eyes

rather small, the occiput impressed, the antennae moderate in length, thick; prothorax without ante-basal impression; scutellum flat, not modified; hind tarsi much shorter than the tibiae, the basal joint longer than the next three combined. Europe and America — by recent introduction.. **Cardiola**

Middle acetabula equally well separated, but, posteriorly, merging by a long gentle slope into the metasternal surface, its limits there not at all well defined by a subobsolete beaded edge, the mesosternum not at all broadly elevated but with a narrow and strongly elevated carina, extending throughout the length to the truncate tip of the process, which extends nearly to the middle of the acetabula and there meets on the same level the truncate tip of the equally elongate metasternal projection; prosternum before the coxae moderate, its external posterior line very obtusely subangulate, the internal acutely cusped; head, eyes and antennae nearly as in *Cardiola*, the prothorax also of similar form, not transversely impressed before the base; scutellum elongate, coarsely, densely sculptured, transversely convex; hind tarsi much shorter than the tibiae, the basal joint not quite as long as the next three combined. Europe.. ***Lophagria**

3 — Mesosternum on a superior plane, throughout its width, to the metasternum and connecting isthmus, its posterior line broadly cusped at the middle; prosternum wholly corneous under the coxae. Middle coxae widely separated, the mesosternum broad and wholly unmodified, the process projecting from the foot of the cliff forming its hind margin, more or less abbreviated and broad, entering between the coxae for a variable but generally short distance, its surface transversely elevated in the middle, its apex angularly protruding into the emarginate apex of the long broad metasternal projection, which is transversely convex; there is apparently a closely amalgamated connecting isthmus of varying form; prosternum before the coxae moderately long, its exposed part flat, with its hind margin strongly and acutely cusped in the middle; head arcuato-truncate, the neck very slender, the eyes moderate, the antennae very stout, with the last joint unusually short, much shorter than the two preceding combined; prothorax not transversely impressed before the base, the hypomera not delimited from the pronotum by an entire beaded edge, broadly constricted behind the coxae; scutellum granularly sculptured, sometimes channeled along the middle; legs long but unusually stout, the basal joint of the hind tarsi much shorter than the next three combined and decidedly thicker, the latter equal among themselves. Nearctic North America........................ **Chitalia**

Mesosternum not on a superior plane to the metasternum and wholly unmodified on its surface.. 4

4 — Corneous plates under the anterior coxae uniting on the median line. 5

Corneous plates very small and rudimentary, covering only a small part of the exposed membrane around the spiracles........................11

5 — Hypomera sharply delimited from the pronotum by an entire beaded edge.. 6

Hypomera not delimited by an entire beaded edge, though definable, as in *Chitalia*, by differences of sculpture................................10

6 — Hypomera but slightly dilated at the middle, long and narrow in outline.

Middle coxae moderately separated, the mesosternal process projecting between them nearly to the middle, parallel-sided, rounded and more or less free at tip, separated from the mesosternal projection by a short and generally somewhat depressed isthmus; prosternum moderate before the coxae, the posterior acute edge of the exposed portion finely cusped at the middle, its surface more or less tumid at the middle near the cusp; head more or less rounded at base, the neck very narrow, the eyes moderate, prominent, the antennae very long, moderately stout, the last joint subequal in length to the two preceding combined; prothorax very strongly narrowed toward base, not transversely impressed before the latter; scutellum more or less densely sculptured, frequently finely carinate along the middle; legs rather slender, the hind tarsi filiform, much shorter than the tibiae, with the basal joint almost as long as the entire remainder. Nearctic North America ....**Lorinota**

Hypomera shorter, relatively much more dilated at the middle........... 7

7 — Mesosternal process free, rather long, obtusely rounded and extending about to the middle of the coxae, where it is separated from the metasternal projection by a short depressed isthmus; middle coxae moderately separated. Body parallel; prosternum rather short before the coxae, flat, the posterior margin cusped at the middle; head arcuato-truncate at base, with evident rounded angles, the neck more than a fourth as wide as the head, the eyes rather small; antennae very thick, the outer joints strongly incrassate and compact, the last stout, ogivally pointed, not as long as the two preceding combined; prothorax rather short, strongly narrowed toward base, deeply sulcate, the sulcus ending posteriorly in a small rounded simple enlargement; scutellum nearly flat, granularly sculptured; elytra well developed, with widely exposed humeri as usual; abdominal impressions narrow, deep, acutely impressed, somewhat coarsely but sparsely punctured; legs moderate in length, stout, the hind tarsi much shorter than the tibiae, with the basal joint as long as the next three combined, the latter equal among themselves. Europe....................................***Falagrioma**

Mesosternal process not free, its truncate apex joining the metasternal projection with or without a short and feebly defined isthmus, all on virtually the same level throughout.................................. 8

8 — Scutellum acutely and strongly bicarinate; body moderately small in size. Form somewhat stout and convex as a rule, middle coxae only moderately separated, the mesosternal process attaining the middle of the acetabula, rounded at tip and separated from the obtuse tip of the shorter metasternal projection by a distinct isthmus, which is delimited from the metasternum by a fine, frequently irregular suture; prosternum short before the coxae, with the median part of the exposed surface deflexed and very obtusely rounded posteriorly; head arcuato-truncate at base, with rounded angles, the neck very narrow, the eyes small, slightly prominent, the antennae moderate in length, rather stout, incrassate distally, the eleventh joint not as long as the two preceding together; prothorax very strongly narrowed toward base, deeply sulcate, the sulcus not enlarged basally, the disk with a fine arcuate and transverse impressed line before the base; elytra with widely exposed humeri; abdominal impressions with a single series of coarse punctures;

legs rather short, moderately slender, the hind tarsi filiform, much shorter than the tibiae, with the basal joint somewhat longer than the next three together, the latter diminishing slightly and gradually in length. Nearctic and Palaearctic regions....................**Falagria**

Scutellum without trace of carination, flat; body minute in size, moderately stout and convex..9

9 — Middle coxae more widely separated than in *Falagria*, the process extending about to the middle of the acetabula, rectilinearly truncate and separated from the metasternal projection by a similar short isthmus joining the latter by a very fine suture; prosternum before the coxae nearly as in *Falagria* but more narrowly produced and less broadly rounded at the middle posteriorly; head truncate at base with very distinct and narrowly rounded angles, the neck wider than in *Falagria*, nearly a third as wide as the head, the eyes similarly small and prominent, the antennae rather short, rapidly incrassate distally, with the subapical joints strongly transverse, the eleventh large, as long as the two preceding combined, obtusely pointed; prothorax short, much more feebly narrowed behind, the surface very finely and obsoletely impressed along the median line but with a distinct short transverse impression before the base; scutellum with large, approximate and feebly elevated granulation, the elytra with widely exposed humeri; legs rather short and slender, the filiform hind tarsi slightly shorter than the tibiae, with the basal joint shorter than the next three combined, the latter equal among themselves. Europe..........***Melagria**

Middle coxae still more widely separated, the mesosternal process wide, truncate at tip, extending to about the middle of the acetabula, where it meets the equally broad metasternal projection in a simple transverse suture, without intervening isthmus; prosternum moderate before the coxae, its hind margin with a broad cusp point at the middle, the cusp not at all rounded; head arcuato-truncate at base and with distinct rounded angles, the neck very narrow, barely a fourth as wide as the head, the eyes well developed, prominent; antennae moderately long, not very strongly incrassate distally, the tenth joint much longer than the ninth and but slightly wider than long, the eleventh shorter than the two preceding combined, ogival and acutely pointed; prothorax small as in *Melagria*, much less narrowed at base than in *Falagria*, acutely and deeply sulcate, the sulcus ending posteriorly in a small deep fovea scarcely wider than the sulcus; surface not impressed before the base; scutellum as in *Chitalia*, sparsely and acutely granulose, the granules sometimes parted along the middle; elytra with widely exposed humeri; abdominal impressions subimpunctate; legs rather short but slender, the hind tarsi very slender, filiform, much shorter than the tibiae, with the basal joint fully as long as the next three combined. Nearctic America........................**Leptagria**

10 — Body very minute, parallel, rather strongly depressed, the middle coxae somewhat narrowly though distinctly separated, the mesosternal process extending about to the middle, arcuato-truncate at tip, meeting the transversely convex metasternal projection on the same plane at a rather fine suture and without intervening isthmus; prosternum before the coxae moderate, its hind margin broadly angulate, the angle

rounded; head large, quadrate, sinuato-truncate at base, the angles very distinct and narrowly rounded, the neck very slender, scarcely a fourth as wide as the head, the median line deeply impressed at and anteriorly to the middle, the eyes small, rather finely faceted; antennae moderate in length, the second joint very much longer as well as thicker than the third; prothorax small, only moderately narrowed at base, finely, feebly impressed along the median line throughout the length, the surface not transversely impressed before the base; side margins acute, marked by larger punctures bearing stiff setae but not beaded; scutellum feebly sculptured, flat; elytral humeri moderately exposed; abdominal impressions impunctate; legs rather short, slender, bristling throughout with sparse erect setae; hind tarsi filiform but very short, the basal joint not longer than the next two combined, two to four subequal, rather short; claws well developed, somewhat strongly arcuate. Florida..**Aneurota**

Body only moderately small in size, much stouter, convex, not parallel, the anterior parts much narrower than the hind body; middle coxae moderately separated, the mesosternal process extending fully to the middle, its tip arcuate, slightly free and separated from the correspondingly sinuate apex of the shorter, transversely convex metasternal projection by a very short, scarcely depressed isthmus; prosternum moderate before the coxae, its hind margin broadly angulate, the angle slightly rounded, the corneous plates under the coxae thinner and paler than usual, their inner margins arcuate, attaining the median line posteriorly but leaving a small triangle of membrane exposed anteriorly; head rounded behind, convex, the median line not impressed, the neck very slender, scarcely more than a fifth as wide as the head; eyes rather small, but slightly prominent; antennae long, gradually and slightly incrassate distally, the second and third joints long, subequal, the subapical not transverse but compactly joined, the eleventh not quite as long as the two preceding combined, pointed; prothorax only moderately narrowed at base, convex, acutely sulcate along the median line except at apex, the sulcus ending posteriorly in a large deep fovea, which is sometimes transverse, the surface also sometimes transversely impressed near the basal margin; scutellum flat, acutely granulose; elytral humeri very widely exposed; abdominal impressions subimpunctate; legs long, very slender, the hind tarsi almost as long as the tibiae, the basal joint as long as the next three combined, the latter successively decreasing in length; claws slender, moderately arcuate. Pacific coast of America. **Lissagria**

11 — Form much more slender than in *Lissagria*, convex, the middle coxae more or less narrowly separated, the mesosternal process extending to the middle, sometimes parallel-sided and very narrow but varying somewhat, the apex arcuate, free and separated from the short metasternal projection by a long, transversely and strongly convex, more or less distinctly depressed isthmus; prosternum before the coxae moderate in extent, its hind margin on the exposed surface broadly and obtusely angulate, the angle rounded; on the inner or subcoxal edge it is strongly and acutely cusped at the middle; head rounded at base, the neck about a fourth as wide, the eyes moderate, not at all prominent,

the surface very feebly and finely impressed along the median line toward base; antennae rather long but strongly and gradually incrassate distally, the first three joints subequal in length, the subapical slightly transverse, equal in length, the eleventh about as long as the two preceding combined, pointed; prothorax only moderately narrowed toward base, very finely and rather feebly impressed along the median line, not transversely impressed before the scutellum, the sulcus ending posteriorly in a very slight enlargement; hypomera as in *Falagria*, clearly delimited from the pronotum by an entire beaded edge; elytra large or small, the humeri more or less widely exposed; scutellum flat, granularly sculptured; abdominal impressions moderately and not densely punctured; legs slender, the hind tarsi long, slender and filiform, the basal joint much elongated, the next three rapidly decreasing in length. Pacific coast of America................................**Falagriota**

The succession of genera in the above table seems to be fairly in accordance with natural affinities. The first three genera and *Aneurota* are highly specialized types, without any close allies, *Cardiola* differing from any other genus of the subtribe in its deep mesocoxal cavities, which are very abruptly excavated on all sides; *Lophagria* is wholly peculiar in its strongly carinate mesosternum and *Chitalia* differs from any other in the uniform elevation of the entire mesosternum above the surfaces posterior thereto. *Aneurota* is wholly isolated in tarsal structure and in general habitus. The small subcoxal plates of *Falagriota*, which comes last in the series, may be either rudimentary or vestigial. I incline to the opinion that we have here a case of arrested development, due to some obscure environmental condition, basing this supposition upon the hypothesis that the archetypes of the present subtribe came into being somewhere within the nearctic regions and migrated to Europe by way of Greenland. Such of the original stock as found its way to the Pacific coast has, for some undiscoverable reason, lagged behind in development and has remained in an almost primitive condition as far as the subcoxal plates are concerned, constituting to-day the genus *Falagriota*. The genus *Lissagria*, also inhabiting the Pacific coast regions, has progressed materially further than *Falagriota* in the development of these singular protective plates, but is still somewhat behind the present standard of other faunal regions. The foreign genera indicated above are the following: —

LOPHAGRIA n. gen. — This genus belongs to the *Cardiola* type in general structure, particularly of the prothorax, but differs in the posteriorly open middle coxae, a character common to all the genera following in the table and is wholly isolated in the carinate mesosternum. In no other instance, either in the Falagriae or Tachyusae known to me, is there the slightest trace of the carinate median line of the mesosternum which is so strongly and completely developed in *Lophagria.* The genus is founded upon a species sent to me by Mr. Reitter under the name *Falagria subaenea* Epp., taken at Taschkend.

FALAGRIOMA n. gen. — The type of this genus and the only species at present assignable to it as far as known to the writer, is the common *Falagria thoracica* Curt., a specimen from the region of the Caucasus being now at hand. It is distinguishable at once from the true *Falagria* by the free mesosternal process, simple and flat scutellum and other characters as stated in the table. The antennae and legs are unusually thick, the prothorax rather short and broad and somewhat strongly narrowed at base; the elytra are moderately developed, having close-set granuliform sculpture toward the scutellum, which is flat and covered with distinctly separated, abruptly elevated minute tubercles, the sculpture of these parts being almost exactly as in *Chitalia.* The impressions of the abdomen are deep and almost sculptureless, having only a few remotely and unevenly spaced, moderately coarse punctures.

MELAGRIA n. gen. — This genus is one of the allies of *Falagria*, having a nearly similar structure of the intermesocoxal parts, but is composed of more minute species, having the scutellum flat and wholly devoid of any trace of the two very prominent parallel carinae of that genus; it also has a smaller and more abbreviated prothorax, less narrowed at base and with obsolescent median sulcus, the impression before the base, wanting in *Falagria*, being large and deep. Its species are apparently rather numerous and those in my cabinet are identified for me by Mr. Reitter under the names *Falagria nigra* Grav., *laevigata* Epp., and *jonica* Reitt.

Cardiola Rey.

The occurrence of this genus in America is probably due to recent fortuitous importation and it is by no means certain that it has established itself. It is one of the more isolated of the Falagriae, as may be readily conceived by a glance at the characters given in the table, and is not in any sense a subgenus of *Falagria.* In the present subtribe the bottom of the middle coxal cavities slopes gently upward posteriorly, merging gradually into the metasternal surface behind in all the genera except *Cardiola*, where the cavities are abruptly deep and with steep walls on all sides as before stated, and their edges are still more sharply defined throughout by a fine but strong bead, causing the metasternal projection to be abruptly limited at the sides, the latter condition not elsewhere observable except in *Lophagria.* The single species may be defined as follows: —

Form rather stout, convex, highly polished, dark rufo-testaceous, the head and abdomen behind the second segment blackish; legs and antennae pale; vestiture rather long and coarse, decumbent, yellowish in color and distinct but not conspicuous; punctures of the head, pronotum and elytra extremely minute, sparse and indistinct, the elytra not more strongly sculptured toward the scutellum, the latter minutely but acutely, not densely granulose; abdomen closely and more coarsely, asperately punctate, coarsely toward base, finely posteriorly, the impressions with more or less sparse and coarse punctures; head small, the very large, deep subbasal impression impunctate; antennae extending to the middle of the elytra, the subapical joints equal in length, moderately transverse, the second and third equally elongate; prothorax small, slightly wider than the head, somewhat wider than long, the sides arcuately and rather strongly converging to the base, the medial impression broad and shallow, obsolete at apex and in about basal two-fifths; elytra transverse, fully four-fifths wider and two-fifths longer than the prothorax, convex, the humeri very widely exposed, the sides slightly diverging from the humeri, broadly and distinctly arcuate; abdomen narrower than the elytra, the sides parallel and straight, the border thick. Length 2.6 mm.; width 0.65 mm. Pennsylvania (Mt. Airy); common in Europe............................**obscura** Grav.

The single American example before me is wholly identical in every way with the European, indicating that, like *Eulissus fulgidus* Fab., to be subsequently described, it is a recent importation and not native. It may be put down as a truism beyond cavil, that every endemic American species of Coleoptera is distinct from any European species, however closely they may approximate in general form. The early representatives of American or European species, migrating through land connections by way of Alaska or Greenland, have all been modified in such degree as to be specifically distinct at the present day. The occurrence of recent importations is usually sporadic and in the neighborhood of ports of entry and very few recent importations to either continent from the other have become widely diffused, except some generally destructive species of unusual adaptability and a relatively limited number that are well known to be cosmopolitan and so continually subject to transportation throughout the world in commercial ships. A recognition of this truth, which can be easily demonstrated to any careful observer, would have saved many harmful and misleading errors in our recent faunistic catalogues, notably that of the late Dr. Hamilton on the Coleoptera common to Europe and America, which is in considerable part erroneous. In a conversation with Mr. S. H. Scudder, of Cambridge, Mass., I was informed that the facts stated above in regard to the Coleoptera were equally true even of the Macrolepidoptera.

Chitalia Shp.

This remarkable genus was founded by Dr. Sharp upon a few species belonging to the Sonoran province of the nearctic fauna of Mexico, but it proves to be one of the most widely disseminated types of North American Falagriae. It is also completely isolated in its structural characters as previously stated. The small, clearly separated, acutely elevated granules of the scutellum are frequently parted along the middle, giving rise to the channel mentioned by LeConte in describing *Falagria scutellaris*, but there is seldom any trace of a true indentation of the scutellar plate, and the character is moreover rather inconstant, except in those species in which it is strongly developed; in *bilobata*, for example, a very narrow parting may be observed in some individuals, which is barely traceable or obsolete in others; there is never any trace of the medial carinule of *Lorinota.* The middle coxae are more widely separated and the mesosternal process shorter than in any other genus of the subtribe; the coxae are, in fact, very remote in some species. The elevation of the entire mesosternum above the metasternum and intermesocoxal parts is entirely peculiar to *Chitalia.* The antennae are rather long and thick, the last joint notably short and stout, the subapical joints compactly joined but variable in form. The prothorax is not only strongly narrowed at base but broadly and sinuously constricted behind the widely inflated anterior part, and the surface sloping toward the profound median sulcus is frequently closely granulose, this peculiar sculpture appearing also, in very minute form, on the basal parts of the elytra toward the scutellum. The sculpture of the abdominal impressions varies a good deal and gives opportunity for a division of the species as follows: —

Punctures of the abdominal impressions very coarse and closely, polygonally crowded.. 2

Punctures of the impressions coarse but smaller, rounded and always clearly separated; species smaller in size, the prothorax relatively much smaller and less inflated at the sides anteriorly, the head more truncate at base.. 7

2 — Large punctures of the abdominal impressions shallow, with flat floors which are densely and minutely punctulate. Form rather stout, convex, shining, pale brownish-testaceous in color with feeble subaeneous reflection, the head slightly darker, the abdomen behind the third segment clouded with blackish; legs and antennae pale; vestiture inconspicuous; punctures of the head fine but distinct, sparse, those of the pronotum finer and sparse but becoming larger, closer and granose toward the sulcus except at apex, of the elytra very minute, sparse and inconspicuous, finely granulose and close toward the scutellum, of the abdomen sparse, fine and less sparse apically, strongly asperate toward base; head parallel at the sides with broadly rounded basal angles, the surface feebly impressed on the median line of the occiput; antennae thick, extending about to the end of the elytra, moderately incrassate, the subapical joints slightly wider than long, the tenth slightly longer than the ninth, the eleventh very short, stout and oval, the third much elongated, longer than the second, the latter as long as the first but thinner; prothorax fully as wide as long, somewhat wider than the head, the sides anteriorly strongly rounded, prominent, thence very strongly converging and strongly sinuate to the base, the sulcus deep, widely im-

pressed, acute at the bottom, not extending quite to the apex or base; elytra wider than long, two-fifths to two-thirds wider than the prothorax and about a third longer, convex, the suture finely and deeply impressed for a short distance behind the scutellum, the latter with a narrow entire canaliculiform parting of the granulation; humeri widely exposed, obliquely rounded; sides more arcuate posteriorly; abdomen distinctly narrower than the elytra, with parallel and feebly arcuate sides; legs long, moderately stout. Length 3.5 mm.; width 0.8–0.88 mm. New Mexico (Gallup)........................**intricata** n. sp.

Large punctures of the impressions much deeper, with less extended and simple floors, or, never having more than a trace of minute punctulation.. 3

3 — Scutellum distinctly and apparently constantly channeled along the middle.. 4

Scutellum transversely convex basally, evenly granulose throughout, or never with more than a very fine inconstant, incomplete or fugitive channeling.. 6

4 — Color blackish, the apex of the abdomen and legs testaceous, the antennae fuscous. Form attenuate, the vestiture fine, subsericeous; prothorax ovate, very strongly narrowed behind, deeply canaliculate, longer than wide, densely punctulate; scutellum distinctly channeled; elytra convex, not at all punctulate; abdomen finely punctate. Length 3.5 mm. New York (Coney Island). [=*Falagria scut.* Lec.].
scutellaris Lec.

Color black or blackish throughout, the tip of the venter not paler; elytra very minutely but evidently punctulate........................... 5

5 — Form stout, convex, the surface polished, piceous-black throughout, the legs dark testaceous, the antennae blackish, paler at base; vestiture short, fine, sparse and inconspicuous; head convex, wider than long, arcuato-truncate at base with widely rounded angles, the sides parallel, the punctures fine, sparse but distinct; eyes rather large; occiput feebly impressed along the median line; antennae extending fully to the end of the elytra, thick though only feebly incrassate distally, all the joints elongate, the tenth distinctly elongate and two-thirds as long as the eleventh, somewhat longer than the ninth, the third much longer than the first or second; prothorax large, somewhat wider than long, rather distinctly wider than the head, the sides anteriorly circularly rounded to the neck, abruptly, strongly converging and sinuate thence to the base, the sulcus acute and deep, not attaining base or apex, the surface broadly flat and gently sloping toward the sulcus and densely and strongly granulose almost throughout; scutellum sparsely and strongly granose, with a strongly marked, somewhat impressed median channel; elytra transverse, fully three-fourths wider but scarcely more than a fourth longer than the prothorax, convex, the sides more arcuate posteriorly, the humeri widely exposed but somewhat oblique, the punctures very fine and sparse, close and granuliform toward the scutellum, rather distinct; abdomen narrower than the elytra, parallel, sparsely punctulate, the punctures coarser and more asperate basally; middle coxae very remotely separated, the mesosternal process projecting more than usually between the coxae, with the transverse suture

strongly sinuous. Length 3.1 mm.; width 0.85 mm. Mississippi (Vicksburg)..**granulosa** n. sp.

Form rather less stout, convex, polished throughout, similar in coloration to the preceding species, the prothorax and basal segments of the abdomen faintly rufo-piceous; vestiture very fine, sparse and inconspicuous; head and antennae nearly as in *granulosa*, the sparse punctulaton finer and scarcely visible, the occiput not at all impressed at the middle, the third antennal joint but little longer than the second, the ninth and tenth similarly elongate; prothorax smaller, about as long as wide, equal in width to the head, the sides circularly rounded to the neck from just before the middle, thence less abruptly but equally strongly converging and sinuate to the base, the surface very finely, sparsely punctulate throughout, becoming granulose only near the posterior end of the equally deep and similar sulcus, the surface adjoining the latter not broadly flattened but strongly convex; scutellum sparsely granose, the granules more narrowly parted along the middle, forming a narrower channel which is not at all impressed; elytra less transverse, four-fifths wider than the prothorax and a third longer, otherwise similar in form and finely, deeply impressed on the suture for a short distance behind the scutellum, the punctulation much finer and everywhere sparse, the granulation toward the scutellum extremely fine, sparse and scarcely distinct even under high power of the hand lens; abdomen and intermesocoxal parts nearly similar, the hind tarsi scarcely two-thirds as long as the tibiae. Length 3.2 mm.; width 0.76 mm. Mississippi (Vicksburg)..............**illustris** n. sp.

6 — Form stout, convex as usual, shining, piceous-brown in color, the head and abdomen slightly darker; legs and antennae pale throughout; vestiture rather coarse and distinct but short and decumbent; head wider than long, the basal angles very broadly rounded, the punctures fine and sparse, subasperate on the occiput, the latter not impressed; antennae extending fully to the end of the elytra, stout, feebly incrassate and compact, the subapical joints fully as long as wide and subequal, the third much longer than the second; prothorax about as wide as the head and as long as wide, the sides rounded and inflated anteriorly, strongly, abruptly converging and broadly sinuate thence to the base, the surface finely, sparsely punctulate, the punctures becoming close and granose throughout the length on the convex slopes of the sulcus, the surface at the sides near the base obliquely and linearly impressed; base sinuate, fitting over the scutellum, the latter densely granulose and opaque, paler in color, the granules finely parted along the middle, the channel inconstant and unimpressed; elytra wider than long, large, of the usual form, the punctures very fine, dense and granuliform toward the scutellum; abdomen as in *granulosa* but more densely punctulate posteriorly, the punctures similarly coarser, asperate and very sparse toward base. Length 3.1 mm.; width 0.8 mm. Ohio and Michigan. [= *Aleochara bil.* Say]....................**bilobata** Say

Form much less stout, shining, dark rufo-piceous, the head and posterior parts of the abdomen darker, the first three segments of the latter and the legs pale testaceous; antennae blackish, paler toward base; pubescence very fine, inconspicuous; head rather larger than in *bilobata*, slightly wider than the prothorax and less rounded at base, similarly punctate, the antennae shorter and thicker, extending to the middle of the elytra, more incrassate distally, the subapical joints evidently transverse, the tenth somewhat longer than the ninth, the third longer than the second as usual; prothorax of the usual form, fully as wide as long, medially sulcate and impressed at the sides of the base as in *bilobata* but with the surface at each side of the sulcus flatter, though similarly densely granulose throughout the length, the granules gradually smaller and feebler anteriorly; scutellum acutely and somewhat closely granose, the granules not parted along the middle but tending to form irregular longitudinal lines throughout; elytra smaller than in *bilobata* but similarly sculptured, about three-fourths wider and a third longer than the prothorax; abdomen nearly as in *bilobata;* intermesocoxal parts less punctate. Length 3.0–3.5 mm.; width 0.75 mm. Canada (Ottawa), — W. H. Harrington........................**canadensis** n. sp.

Form nearly similar to *canadensis*, polished piceous-black throughout, the legs pale red-brown, the antennae dusky, paler toward base; vestiture fine, not very conspicuous; head rather large and about as wide as the prothorax in the male, decidedly smaller and not as wide as the latter in the female, broadly arcuato-truncate at base, the angles broadly rounded, the punctures very minute and sparse; antennae longer and more slender than in *canadensis*, nearly as in *bilobata*, the subapical joints fully as long as wide to a little longer; prothorax as long as wide, of the usual form, the sides abruptly and strongly converging and sinuate posteriorly to the base, the sulcus deep as usual, the granules nearly as in *bilobata*, except that they grow rapidly finer and sparser exteriorly and apically; scutellum granulose, the granules not parted along the middle; elytra and abdomen as in the two preceding species. Length 2.8-3.1 mm.; width 0.7 mm. Iowa to New Jersey. **nigrescens** n. sp.

7 — Body much smaller in size than in the preceding species, stout, moderately convex, polished, pale rufo-testaceous, the head and abdomen slightly darker, the legs and antennae pale throughout; pubescence inconspicuous; head large, wider than long, parallel and straight at the sides, rectilinearly truncate at base, the angles rather narrowly rounded; eyes moderate in size; surface not impressed, minutely, sparsely punctulate, the antennae shorter than in the preceding section, stout, extending to about basal third of the elytra, moderately incrassate distally, the subapical joints distinctly transverse, the second and third equal; prothorax fully as wide as long, much narrower than the head, the sides prominently rounded anteriorly, thence not abruptly but strongly convergent and straight to the base, not sinuate as in the preceding section; surface very minutely, sparsely punctulate, more strongly and closely on the convexity at each side of the deep median sulcus, having also a small fovea at each side near the base; scutellum flat, sparsely, granose, the granules widely parted along the middle; elytra three-fourths wider and about a third longer than the prothorax, very sparsely, almost invisibly punctulate, more evidently and subgranularly toward the scutellum, the humeri widely and obliquely exposed, the suture impressed narrowly and deeply behind the scutellum, the sides more

arcuate posteriorly; abdomen parallel, arcuate at the sides, in the middle fully as wide as the elytra, minutely and very sparsely punctulate throughout, the impressions with numerous coarse and unevenly distributed punctures. Length 2.2 mm.; width 0.55 mm. Florida. [=*Falagria part.* Lec.] .... **partita** Lec.

Body equally small but broader posteriorly, the head and prothorax relatively narrower, the elytral humeri more broadly exposed, polished, similar in coloration and vestiture throughout; head transverse, inflated toward the truncate base, the hind angles more broadly rounded, the punctures extremely minute and sparse; antennae stout, very strongly incrassate distally, but little longer than the head and prothorax, the subapical joints strongly transverse; prothorax small, as long as wide, very much narrower than the head, formed nearly as in *partita*, the sides somewhat sinuate and very strongly convergent toward base, the punctulation throughout excessively fine and sparse, scarcely at all closer or more distinct on the convex slopes of the deep median sulcus; scutellum closely granose, the granules parted along the the middle as in the preceding; elytra fully four-fifths wider and about two-fifths longer than the prothorax, similarly sculptured and with the suture conspicuously impressed behind the scutellum; abdomen parallel with the sides feebly arcuate, at the middle fully as wide as the elytra, finely, sparsely punctulate, the impressions with few coarse punctures, the latter almost wholly wanting in the third impression; fourth tergite feebly concave and wholly sculptureless along the basal margin as in *partita*. Length 2.3 mm.; width 0.63 mm. Florida (southeast coast). **floridana** n. sp.

The species are rather numerous and will require care in discrimination; they are divisible into two subgeneric groups as indicated above, the first comprising the larger species with more rounded base of the head, more abruptly sinuate sides of the prothorax from before the middle to the base, coarsely and densely punctate abdominal impressions, longer antennae and unimpressed intermesocoxal parts, with the median part of the short mesosternal process projecting into a corresponding sinus in the apex of the metasternum, which I regard as typical *Chitalia*, and the other composed of smaller species, with more truncate base of the head, shorter and more incrassate antennae and without granules on the pronotum, with sparsely punctate abdominal impressions, and, more particularly, a gradually concave intermesocoxal surface, with the mesosternal process rectilinearly truncate and almost completely amalgamated with the metasternum, the suture very fine. The former of these groups is purely nearctic in range, excepting the Pacific coast, the second being apparently West Indian. The description of *scutellaris* given above, is drawn from the published statements of LeConte, as I have not examined the unique type. It is evidently related closely to *granulosa* but apparently has a narrower prothorax, although the expression "longer than wide" in the original description, as well as the statement that the elytra are devoid of punctuation, is probably erroneous. The elytral punctulation is quite distinct in *granulosa*, where the scutellar channel is well developed, but, in *illustris*, is excessively fine and subinvisible throughout, even toward the scutellum, but the pronotum, which is said to be "densely punctulate" in *scutellaris*, is almost smooth in *illustris*, contrasting very greatly with the flattened and densely granulose slopes of the median sulcus in *granulosa*. For these reasons I do not feel warranted in identifying any one of the species before me as the *scutellaris* of LeConte.

Lorinota n. gen.

This genus, which is also one of the characteristic types of nearctic North America, differs profoundly from the preceding in its less robust form of body, normal mesosternum, rather narrowly separated middle coxae, with the mesosternal process projecting between them as a narrow and parallel-sided, free, spatuliform process, separated from the short metasternal projection by a deeply depressed and clearly defined short isthmus, in its longer and more slender antennae, generally more rounded base of the head and longer prothorax, which is equally deeply sulcate but without the peculiar coarse granulation of *Chitalia*, although the punctures frequently become asperulate. The hypomera are well defined by a beaded edge, but are longer and narrower than usual and much more parallel-sided than in any of the succeeding genera. The scutellum is carinate, roughly sculptured, with its posterior part bent upward to the plane of the elytra and its basal part covered by the broadly arched base of the pronotum as in *Chitalia*, though here the pronotal base is truncate or arcuate from a vertical point of view and the basal margin is coarsely and strongly beaded; the scutellar carina is usually incomplete and frequently very fine. The elytra and abdomen are much as in *Chitalia* and other genera of this subtribe, but, on the former, the fine punctulation does not become closer and granuliform toward the scutellum as it does in *Chitalia*, *Falagrioma*, *Lissagria* and perhaps some other genera. *Lorinota* further differs from *Chitalia* in having the impressions of the abdominal tergites gradually feebler from the first to the third, and even more variably sculptured, and in having the legs more slender, with the hind tarsi longer, more filiform, equally slender throughout, with the basal joint very much longer, sometimes almost as long as the entire remainder. The apex of the elytra externally is scarcely at all produced posteriorly and is either broadly angulate or rounded. This genus is without doubt closely related to the gigantic Mexican species, some 5 mm. or more in length, for which Dr. Sharp proposed the genus *Stenagria*, but, as the large extension of the prosternum before the coxae is particularly mentioned as one of the most prominent characters of *Stenagria*, I believe *Lorinota* will prove to be distinct, since the ante-coxal part of the prosternum is no more developed here than in *Chitalia* or any other related genus that follows in the table given above. The species are rather numerous and may be readily divided into two groups, which are confined to special faunal regions, as follows: —

Species of the Sonoran fauna, larger in size, the scutellum coarsely and unevenly elevated along the median line for a short distance from the base, the elevation usually succeeded on the median line by a short smooth depression.. 2

Species of the Atlantic nearctic fauna, smaller in size and frailer in structure, the scutellum with a very fine but even carina on the median line, usually much abbreviated and variably so within specific limits.. 5

2 — Abdomen very minutely and sparsely punctulate throughout......... 3

Abdomen finely and closely punctulate.................................. 4

3 — Form rather stout, convex, black or piceous-black throughout, polished, the legs dark red-brown, the antennae fuscous, paler toward base and sometimes at apex; vestiture short and rather coarse but sparse and wholly inconspicuous; head large, wider than long, the sides behind the small and prominent eyes converging and slightly arcuate for a long distance, the base abruptly arcuato-truncate, the angles

more than right but very distinct, the surface minutely and sparsely punctulate, broadly concave in the male, somewhat flattened in the female; antennae rather stout, but feebly incrassate distally, extending fully to the middle of the elytra, the third joint much longer than the first or second, the subapical joints fully as long as wide; prothorax distinctly narrower than the head in both sexes, very slightly longer than wide, the sides evenly rounded anteriorly, thence very strongly converging and just visibly, broadly sinuate to the base, the surface, like that of the head, devoid of minute ground sculpture, very minutely and sparsely punctulate throughout, the sulcus very deep, impressed; scutellum minutely, densely rugulose; elytra four-fifths wider but scarcely a fourth longer than the prothorax, the humeri very widely exposed and oblique at base, the sides very feebly diverging from base to apex, arcuate, the surface convex, having a ground sculpture of minute lines forming rather coarse reticulations, also finely, sparsely and asperulately punctured throughout, the suture linearly impressed just behind the scutellum; abdomen very minutely, feebly reticulate in wavy transverse lines, the basal impressions wholly impunctate except the first, which has a few widely spaced coarse punctures, the sides parallel and distinctly arcuate, at the middle subequal in width to the elytra; legs long, moderately slender, the basal joint of the hind tarsi equal in length to the next three combined, the latter decreasing uniformly and slowly in length; claws rather short, slender. Length 3.2 mm.; width 0.75 mm. New Mexico (Las Vegas) and Arizona (Flagstaff)..**caviceps** n. sp.

Form somewhat less stout, convex, polished, dark rufo-piceous in color, the head and elytra slightly more blackish than the prothorax; legs piceo-testaceous, paler distally, the antennae fuscous, gradually pale basally; vestiture sparse and inconspicuous; head slightly wider than long, the sides at first feebly converging behind the eyes, then very broadly rounded into the less arcuate base, the angles obliterated; surface minutely, sparsely punctulate, broadly flattened or feebly concave, the antennae moderately stout, scarcely visibly incrassate distally, long, extending fully to the end of the elytra, the second and third joints subequal, the outer joints fully as long as wide, the sparse erect bristles rather conspicuous throughout; prothorax nearly as in *caviceps* but narrower and distinctly more elongate with the strongly converging sides straight, slightly narrower than the head, similarly deeply sulcate and finely, sparsely punctulate; scutellum finely, densely rugulose; elytra nearly similar in form but with the surface perfectly smooth, like the anterior parts, and not micro-reticulate and with the very sparse punctulation not asperulate and scarcely perceptible, the post-scutellar impression small and deep; abdomen parallel with arcuate sides, everywhere distinctly narrower than the elytra, finely and feebly micro-reticulate, the first impression coarsely and densely punctured at the bottom, the second and third much narrower than the first and impunctate or very sparsely and obsoletely so; legs long and slender, the femora not as thick as in *caviceps*, the hind tarsi longer and more slender, three-fourths as long as the tibiae, the basal joint almost as long as the entire remainder. Length 3.2 mm.; width 0.65 mm. Arizona (Pinal Mts.), — H. F.Wickham...... **pinalica** n. sp.

4 — Form moderately stout, convex, polished, pale rufo-piceous throughout, the abdomen slightly clouded apically, the antennae fuscous except basally, the legs pale; pubescence inconspicuous; integuments not at all micro-reticulate at any part; head large, slightly transverse, broadly, evenly arcuate at base, the sides parallel, the angles broadly rounded; eyes small, slightly prominent, the surface minutely, sparsely punctulate, broadly impunctate toward the middle, where the surface is evenly convex in the male or feebly, broadly impressed along the middle in the female; antennae very long, moderately slender, fully attaining the apex of the elytra, only very slightly incrassate distally, the third joint longer than the second, the subapical rather longer than wide; prothorax elongate, distinctly narrower than the head, especially in the male, the sides broadly, angularly prominent at apical two-fifths, rounded thence to the neck and strongly converging and very feebly sinuate to the base, the sulcus deep, the surface minutely, sparsely punctulate, asperately and less sparsely so very near the sulcus throughout but particularly toward base; scutellum acutely granose; elytra four-fifths wider but only very slightly longer than the prothorax, minutely, sparsely punctulate throughout, the humeri widely and obliquely exposed at base, the impression behind the scutellum large and deep; abdomen parallel with evenly arcuate sides, at the middle as wide as the elytra in the male, narrower in the female, very finely, moderately closely punctulate, the punctures asperate and coarser on the first segment, finer on the second and third and still finer posteriorly, the first impression broad, arcuate, coarsely and closely but not polygonally punctured, the second and third narrower and straighter, each with a single series of coarse and well spaced punctures in median half; legs long, the basal joint of the hind tarsi longer than the next three combined. Length 3.2–3.6 mm.; width 0.7 mm. Arizona....**arizonica** n. sp.

Form nearly similar, convex, polished, the integuments devoid of microreticulation throughout, dark piceo-castaneous throughout, the head blackish, the antennae sometimes slightly infumate except at base; pubescence inconspicuous; head moderate, nearly as long as wide, subparallel, the basal angles very broadly rounded and obliterated, the punctures very minute and sparse, slightly larger and asperulate on the occiput, the vertex not impressed in the types; antennae much shorter than in the preceding, thicker and much more incrassate distally, extending to about the middle of the elytra, the second and third joints equal, the subapical obviously wider than long; prothorax elongate, nearly as in *arizonica* throughout, except that the fine punctulation is only very obsoletely asperate near the sulcus, distinctly narrower than the head; scutellum similar; elytra also similar except that the minute punctulation is more close-set and still closer, coarser and decidedly asperate very near the suture behind the scutellum, the impression much feebler and more diffuse; abdomen parallel, the sides strongly, evenly arcuate, at the middle but little narrower than the elytra, the surface finely, very closely punctulate throughout, somewhat less finely toward base, the first impression large, arcuate, rather coarsely, very densely punctured, the second and third narrower and much less coarsely and more closely punctured than in *arizonica*, impunctate narrowly at the sides; hind tarsi very slender, the basal joint about as long as the entire remainder. Length 2.9–3.4 mm.; width 0.66–0.69 mm. Colorado (Colorado Springs), — H. F. Wickham. **fontinalis** n. sp.

Form nearly similar, convex, polished, the sculpture similar but stronger, body piceous-black throughout, the elytra and basal ventrals somewhat paler, the antennae infuscate, paler toward base; femora blackish, the tibiae piceous, the tarsi flavescent; vestiture wholly inconspicuous; head as in *fontinalis*, the basal angles very broadly rounded but having the surface very broadly, feebly impressed toward the median line, the latter very finely and feebly but acutely impressed by reflected light; antennae longer, extending to the end of the elytra, stout but rather less incrassate distally, the second and third joints equal, the ninth fully as long as wide and rather longer than the tenth, which is somewhat wider than long; prothorax formed as in the two preceding species, narrower than the head, the minute and sparse punctulation closer, coarser and rather strongly asperate on the convex slopes of the deep sulcus, especially at base; scutellum similar; elytra nearly similar, more transverse, fully four-fifths wider than the prothorax but not definitely longer, the punctulation unusually close and strongly asperate, especially near the inner basal angles, the sutural impression stronger than in *fontinalis;* abdomen similar in form and sculpture, not quite as wide as the elytra, the punctures of the first impression coarse and irregularly crowded, those of the second and third only slightly coarse but closely and irregularly crowded; basal joint of the hind tarsi almost as long as the entire remainder, the next three uniformly and rapidly decreasing in length. Length 3.1–3.4 mm.; width 0.66–0.72 mm. New Mexico (Cloudcroft), — W. Knaus. **acomana** n. sp.

5 — Head strongly, almost evenly rounded at base...................... 6

Head broadly arcuato-truncate at base, with much more distinct angles.. 7

6 — Body moderately slender, convex, polished, the integuments not microreticulate at any part, pale rufo-castaneous, the abdomen blackish posteriorly, the elytra sometimes slightly paler at base; pubescence not very conspicuous; head orbicular, convex, not impressed, the eyes small, the antennae extending fully to the apex of the elytra, rather slender toward base but sensibly thick and incrassate distally though very gradually as usual, the subapical joints equal and slightly longer than wide, the second and third subequal; punctures very minute and sparse but becoming larger, closer and asperate on the occiput; prothorax distinctly narrower than the head, narrow and elongate, the sides evenly rounded anteriorly, thence strongly convergent and feebly sinuate for a long distance to the base, deeply sulcate, the punctures very minute and sparse but becoming closer, larger and asperate narrowly on the convex slopes of the sulcus; scutellum finely and rather sparsely granulose, very finely carinate, the carina sometimes extending to the extreme tip; elytra fully four-fifths wider but only very slightly longer than the prothorax, of the usual form in the preceding section

and having very widely exposed oblique humeri, impressed behind the scutellum, the punctures extremely minute, sparse and scarcely visible; abdomen parallel, with evenly arcuate sides, much narrower than the elytra throughout, minutely, rather closely but not distinctly punctulate, the first segment longer than in the preceding species, narrower at base and more dilated at tip, with its surface flat, the impression large and posteriorly arcuate but shallow, coarsely, closely punctured in median half, the second and third impressions narrow and having some coarse, moderately close-set punctures except at the sides; legs very slender, the hind tarsi almost as long as the tibiae, the basal joint as long as the entire remainder. Length 2.5–2.8 mm.; width 0.66 mm. Pennsylvania, Iowa and Wisconsin. [= *Falagria cing.* Lec.].

cingulata Lec.

Body nearly similar but notably more slender, polished, piceous-black in color, the sides of the elytral base slightly pale, the first two ventrals testaceous though blackish in the impressions; legs and antennae piceous-black, the latter toward base and the tarsi pale; vestiture not distinct; head orbicular, fully as long as wide, convex, minutely, very sparsely and scarcely visibly punctulate except at the base, where the punctures become close, strongly asperate and distinct; antennae long and very slender, scarcely perceptibly incrassate distally, extending rather beyond the elytra, the third joint distinctly longer than the second, the subapical equal and much longer than wide, the eleventh elongated and slender but not as long as the two preceding combined; prothorax in outline nearly as in *cingulata* but not evidently narrower than the head, the sulcus deep but somewhat more abruptly formed, the bordering surface almost similarly convex but with the minute sparse punctulation not evidently closer, coarser or more asperate; scutellum finely granulose, finely carinate but only toward base; elytra similar in form but notably narrower, with the sparse punctulation more asperate and rather more evident, the post-scutellar impression broad and evenly concave; abdomen throughout nearly as in *cingulata*, the fine punctulation rather less close-set but more asperulate; legs very slender, the extremely slender and filiform hind tarsi having the basal joint apparently even longer than the entire remainder. Length 2.5 mm.; width 0.6 mm. Ohio (Cincinnati) and Iowa.

tenuicornis n. sp.

7 — First impression of the abdomen coarsely, rather conspicuously punctured at least toward the middle 8

Basal impression similar to the second and third, acutely impressed, polished and impunctate or nearly so 9

8 — Form slender, convex, polished, dark piceous or blackish, the elytra at base and apex, the first ventral and apex of the second, tibiae, tarsi and antennae toward base, pale flavate, remainder of the latter and femora piceous; pubescence fine, inconspicuous; head convex, wider than long, transversely arcuate at base with rounded angles, the punctures very minute and sparse, not notably asperulate on the occiput; antennae rather stout, attaining the middle of the elytra, distinctly incrassate distally, the three subapical joints obviously transverse, the third slightly longer than the second; prothorax elongate, nearly as in the

two preceding species, the sulcus deep, the punctures extremely minute and sparse throughout, not more asperate near the sulcus except at base; scutellum finely granulose, with a very fine and subentire median carina; elytra very short and transverse, four-fifths wider than the prothorax but scarcely as long as the latter, the punctures very minute and sparse, the sutural impression at the scutellum distinct, the humeri very oblique at base and widely exposed; abdomen parallel with strongly, evenly arcuate sides, much narrower than the elytra, minutely but not very sparsely punctulate, less minutely and more sparsely toward base, the impressions decreasing rapidly in size and depth, the third narrow and feeble, the first deep, strongly arcuate and coarsely, closely punctate except at the sides, the second and third not more coarsely punctate, impunctate along the basal margin; legs very slender as usual. Length 2.4 mm.; width 0.53 mm. North Carolina (Tryon),— shaken from pines...**gracilis** n. sp.

Form somewhat less slender, smaller in size, moderately convex, polished, rufo-testaceous throughout, the abdomen clouded with blackish except toward base, the head and elytra somewhat picescent, the latter flavescent at base and narrowly at apex; antennae and legs pale; head large, wider than long, parallel at the sides, the base very broadly arcuato-truncate, the angles well rounded, the surface unimpressed, finely, sparsely punctulate, the punctures larger and feebly asperate on the occiput; antennae attaining the middle of the elytra, feebly incrassate distally, the second and third joints much elongated, equal, the three subapical wider than long; prothorax only very slightly longer than wide, much narrower than the head, the sides prominent and angularly rounded at apical two-fifths, thence strongly converging and straight to the base, the sulcus and fine sparse punctulation as in *gracilis;* elytra nearly as in that species but not quite so short or transverse, very slightly longer than the prothorax and four-fifths wider, the sparse punctulation slightly asperate, the post-scutellar impression very deep; abdomen nearly as in *gracilis*, the first impression with only a few coarse punctures toward the middle, the second and third feebler and subimpunctate. Length 1.9 mm.; width 0.48 mm. Florida.
parva n. sp.

9 — Rather slender, convex, polished throughout, pale testaceous, the elytra equally pale but subpiceous, paler at base and apex; abdomen less convex than usual, polished, black, the first two segments pale flavate except finely along their basal margins; antennae fuscous, pale at tip and toward base, the legs pale throughout; pubescence wholly inconspicuous; head well developed, broadly arcuato-truncate at base, subparallel at the sides, the eyes rather large and prominent, the basal angles rounded; punctures very minute and sparse, not noticeably larger or asperate on the occiput; antennae long, rather stout, very feebly incrassate distally, attaining the apex of the elytra, the second and third joints equal, the ninth as long as wide, the tenth very nearly so; prothorax distinctly elongate, much narrower than the head, the sides evenly rounded anteriorly, thence strongly convergent to the base, becoming evidently sinuate, the surface convex, the sulcus deep, the punctulation very sparse and almost obsolete; scutellum sparsely, minutely granu-

lose, the fine carina not quite entire; elytra transverse, of the usual form with very widely exposed oblique humeri, the outer sides scarcely as long as the prothorax, the punctulation fine and sparse, the post-scutellar impression broad and deep; abdomen much narrower than the elytra, parallel with arcuate sides, very sparsely, extremely minutely and almost obsoletely punctulate, the impressions subequal, narrow, rather deep, polished and impunctate, the basal with a few very obsolete and widely spaced punctures visible only under high power; legs very slender, the basal joint of the hind tarsi not quite as long as the remainder. Length 2.6 mm.; with 0.62 mm. Iowa.

bilimbata n. sp.

The above identification of *cingulata* Lec., satisfies all the published characters except sculpture of the abdomen and size of the body. The rather close-set punctulation of the abdomen is sufficiently evident, though very fine, but LeConte describes the surface as smooth. The size is given as 3–3.5 mm. in length, which, it seems to me, must be an error, as the species of that size in the present genus are confined to the Sonoran fauna, all the numerous eastern examples in my cabinet being much smaller and frailer insects. It is probable that the author described *cingulata* from a miscellaneous collection of specimens, including *cingulata* proper and other species, as well perhaps as some of the much larger representatives of the genus *Chitalia*, and inadvertently measured some of the larger specimens, making the observation concerning the smooth abdomen from *bilimbata*, or some allied species, where the abdomen is really almost smooth. It would be well, therefore, to consider the species above selected as the true *cingulata*, as it has the scutellar carina frequently entire and therefore liable to be observed with the optical means of research then in vogue and because all the other characters fully satisfy the original description.

Falagria Steph.

This genus is distinguishable at once from any other of the subtribe by the acutely bicarinate scutellum. The body is smaller in size than in either of the preceding genera, convex, generally black or dark in color, with the characters as stated in the table, the legs being rather short and stouter than usual in *dissecta* and allied species, with the basal joint of the hind tarsi much shorter than the next three combined in the first group of the table, longer and equal to the succeeding three in the second with two to four subequal among themselves. The basal impressions of the first three tergites are moderate in width, rather deep, subequal and nearly always coarsely and conspicuously punctured in single line. The base of the pronotum is arched over the scutellum but is sinuate from a vertical viewpoint, more strongly so in the middle. Besides the six American species that follow, *Falagria* will include such European forms as *sulcata* Payk., and *sulcatula* Grav.:—

Elytral punctures fine but asperate and distinct. Atlantic districts.......2

Elytral punctures extremely minute, sparse, not at all asperate and scarcely visible; prothorax more elongate and more strongly constricted toward base. Sonoran faunal districts.................................... 4

2 — Abdominal impressions closely punctured. Form moderately stout, black or piceous-black, the elytra generally somewhat paler; legs piceo-testaceous, the antennae piceous-black throughout; vestiture fine, short, sparse and inconspicuous; integuments polished, not at all micro-reticulate at any part; head wider than long, convex, somewhat inflated but with parallel arcuate sides behind the eyes, which are moderate and prominent; base broadly arcuato-truncate, the angles rounded, the surface minutely, sparsely punctulate, the median line flattened and impunctate except at base; antennae almost attaining the middle of the elytra, moderately slender, rather distinctly, very gradually incrassate distally, the second joint equal in length to the third but thicker, the subapical joints not quite as long as wide; prothorax distinctly wider than the head, somewhat wider than long, the sides inflated and strongly rounded anteriorly, thence strongly convergent and moderately sinuate to the base, which is three-fifths as wide as the disk, the sulcus deep, not attaining base or apex as usual, the surface convex, finely, sparsely, asperately and equally punctulate; scutellar carinae strong, acute and entire as usual; elytra moderate, about one-half wider and a fourth longer than the prothorax, convex, the sutural impression behind the scutellum very small and scarcely distinct, the punctures even, rather close-set, the humeri widely and obliquely exposed at base; abdomen parallel with the sides nearly straight, obviously narrower than the elytra, finely, closely punctured, the punctures attended by flattened and elongate asperities, those of the first and frequently of the second impression coarse and notably closely crowded, generally with carinulate interspaces. Length 1.9–2.5 mm.; width 0.47–0.53 mm. Rhode Island and New York (Catskill Mts.) to Wisconsin (Bayfield) and Texas (Austin)..**dissecta** Er.

Abdominal impressions not very closely punctate; punctulation throughout sparser, the size more minute......................................3

3 — Body slender, convex, blackish-piceous, the elytra piceo-testaceous,

the legs testaceous, the antennae dusky; head nearly as in *dissecta* but relatively larger, parallel and scarcely arcuate at the sides, broadly arcuato-truncate at base with well rounded angles, the sculpture very minute and obsolescent; antennae barely attaining the middle of the elytra, rather strongly incrassate distally, the subapical joints evidently shorter than wide, the tenth longer than the ninth, the second and third equal in length, the first three decreasing uniformly and rapidly in thickness; prothorax scarcely as wide as the head, somewhat wider than long, the sides broadly, evenly rounded in about apical half, then strongly convergent and feebly sinuate to the base, the latter fully two-thirds as wide as the disk, the sulcus deep; surface still more minutely and sparsely and less asperately punctulate than in *dissecta;* elytra one-half wider and fully a third longer than the prothorax, as in *dissecta* but more finely and sparsely punctulate and with the sutural post-scutellar impression long, narrow and deep; abdomen similarly parallel and narrower than the elytra, with close asperulate sculpture, less dense than in *dissecta*, the punctures of the impressions rather close-set but not sufficiently so to be crowded, always circular in form. Length 1.7 mm.; width 0.4 mm. Iowa (Cedar Rapids)....................**iowana** n. sp.

Body slender, more convex, pale piceo-testaceous in color throughout, polished; head as in the preceding species, finely, sparsely punctulate, the median line broadly impunctate even basally; antennae about attaining basal third of the elytra, rather strongly incrassate distally, the second joint much longer than the third as well as thicker, six to ten strongly transverse, eight to ten increasing in length as well as thickness; prothorax small, not quite as wide as the head, strongly convex, in form and obsolete sparse punctulation nearly as in *iowana;* elytra broader and more transverse, four-fifths wider than the prothorax and about a third longer, similarly punctulate, the punctures minute and sparse, the suture with a very short feeble impression behind the scutellum; abdomen also wider than in *iowana* but parallel and straight at the sides, the sculpture moderately close-set and feebly asperulate, less finely and more sparsely toward base as usual, the basal impressions each with a series of moderately coarse circular, widely and irregularly separated punctures, only four to six in number in each impression, the type having but four punctures in the basal impression, two at each side of the middle, the latter broadly impunctate. Length 1.8 mm.; width 0.45 mm. New York (Ithaca),— H. H. Smith....**ithacana** n. sp.

4 — Basal joint of the antenae stout, oval, with rounded sides. Form moderately stout, convex, polished, dark castaneous, the elytra feebly rufescent; legs piceo-testaceous, the antennae dusky, pale at base; vestiture indistinct; head wider than long, parallel, broadly arcuate at base with very broadly rounded angles, the surface almost evenly convex, minutely, sparsely punctulate; antennae extending to the middle of the elytra, distinctly incrassate distally, the joints eight to ten very slightly wider than long, subequal in length, the second a little longer than the third, the former visibly the thicker, both much less inflated than the first; prothorax fully as long as wide and distinctly wider than the head in the female, scarcely in the made, the sides strongly rounded anteriorly, thence abruptly, strongly convergent and broadly, strongly

sinuate to the base, which is barely three-fifths as wide as the disk; surface deeply sulcate, strongly convex, with a short transverse impression just before the base at each side of the middle, the punctulation very minute, not asperate, sparse and subobsolete; scutellum as in the preceding group; elytra three-fourths wider and barely a third longer than the prothorax, sparsely and extremely minutely punctulate, convex, the post-scutellar impression distinct; abdomen much narrower than the elytra, parallel and straight at the sides, arcuately narrowing near the tip, the sculpture not at all asperulate but with very fine and moderately close-set, nearly simple punctulation, which becomes less minute, sparser and somewhat asperate toward base, the basal impressions with coarse, deep, crowded punctures, the interspaces being sublinear. Length 2.0 mm.; width 0.6 mm. Colorado (Cañon City) and New Mexico (Las Vegas) .... **subsimilis** n. sp.

Basal joint of the antennae narrower, more cylindric....................... 5

5 — Form, coloration and sculpture nearly as in *subsimilis*, polished, castaneous; head larger, wider than long, more broadly truncate and less arcuate at base than in *subsimilis*, parallel at the sides, with the angles much more narrowly rounded, sparsely, inconspicuously punctulate; antennae rather thick and distinctly incrassate distally, barely extending to basal third of the elytra, the second joint somewhat longer than the third, joints seven to ten very disctinctly wider than long; prothorax fully as wide as long, equal in width to the head, the sides anteriorly very strongly rounded, more prominent than in *subsimilis*, thence strongly convergent, and broadly, strongly sinuate to the base, the deep sulcus and fine sparse punctulation nearly as in *subsimilis;* elytra and abdomen nearly similar, the latter somewhat broader and fully as wide as the elytra, parallel with slightly arcuate sides, arcuately narrowing toward tip, the fine punctulation rather more close-set, the impressions similarly sculptured. Length 2.2 mm.; width 0.62. Texas (Austin). **texana** n. sp.

Form rather more elongate, larger, polished, piceous-black, the prothorax and basal parts of the abdomen very slightly paler, rufescent; legs pale, the antennae fuscous; pubescence scarcely noticeable; head nearly as in *texana*, the antennae similar in length, moderately incrassate distally, the second joint distinctly longer than the third but scarcely thicker, eighth to tenth wider than long; prothorax as long as wide, slightly wider than the head in the female but not obviously so in the male, the sides inflated and circularly rounded anteriorly from the neck to apical two-fiths, where they become abruptly and angularly, strongly convergent and sinuate to the base, which is barely three-fifths as wide as the disk; sulcus and fine, sparse punctulation as in the preceding species; elytra three-fourths wider and a third longer than the prothorax, sparsely and almost imperceptibly punctulate, the suture narrowly impressed behind the scutellum; abdomen parallel with feebly arcuate sides, widest at about two-thirds from the base, narrower than the elytra, finely, feebly and moderately closely asperulate in sculpture, more coarsely and sparsely toward base, the impressions coarsely and closely punctured; basal joint of the hind tarsi fully as long as the next three combined. Length 2.4 mm.; width 0.65 mm.; Utah (St. George),— H. F. Wickham.................. **angulata** n. sp.

The very numerous examples of *dissecta* before me, from various parts of the country, are fairly homogeneous but, at the same time, there may be some subspecific forms among them. The Texan specimens, for example, are generally smaller in size, with rather paler legs and elytra and usually somewhat less dense abdominal sculpture than those from central New York, but the differences are slight and scarcely specific. The species of the first group of the table constitute a peculiarly American type, those of the second being similar in every way to the European *sulcata.* The palaearctic *sulcatula* forms still another group of the genus, having smaller elytra, with the sides more diverging from the base and impressed throughout the length along the suture and with a rather more elongate scutellum. The abdomen in *angulata* is much more asperulate in sculpture than in *subsimilis* and *texana*, the latter being rather closely allied, the former being distinguishable from *texana* by the more broadly rounded basal angles of the head and narrower abpomen, as well as the thicker basal joint of the antennae; a third specimen, from Austin, is placed at present with the two types, although the prothorax is much more rounded and less oblique at the sides of the apex and the strong convergence and sinuation of the sides posteriorly begins only slightly before the middle; the form in fact appears to be strikingly different, but it may be sexual in origin.

Leptagria n. gen.

The species of this genus are among the more minute of the present subtribe, rather closely allied to *Falagria* in general structure but with the prothorax less constricted behind and having a finer, though very evident, sulcus. They differ from *Falagria* especially in having the scutellum flat, simply granulose, though with the granules tending to coalesce into short irregular longitudinal lines, and frequently parted along the middle in much the same manner as in

Chitalia. They also differ in the more widely separated middle coxae, with the broadly arcuato-truncate mesosternal process fitting closely against the metasternal projection, on the same level, without depression of any kind and without an intervening isthmus. The basal joint of the hind tarsi is very slender, fully as long as the next three combined, the latter decreasing slowly and regularly in length. In some features *Leptagria* recalls the European genus *Melagria*, but may be readily distinguished by the characters of the table. We know at present but two species which may be described as follows: —

Form slender, subparallel, moderately convex, polished, pale brownish-testaceous, the antennae distally, head and an apical abdominal cloud darker, piceous; pubescence inconspicuous; head wider than long, parallel, the base broadly arcuato-truncate with the angles rounded; eyes well developed, rather prominent, the punctures very minute and sparse; antennae extending nearly to the middle of the elytra, moderately incrassate distally, the second joint much longer than the third, seven to nine distinctly transverse, equal in length, the tenth decidedly longer but still obviously wider than long, the eleventh short, obtuse; prothorax small, somewhat wider than long, evidently narrower than the head, the sides evenly rounded anteriorly, thence strongly converging but scarcely at all sinuate to the base, which is nearly three-fourths as wide as the disk; sulcus ending abruptly near apex and base, the surface strongly convex, very minutely, sparsely and obsoletely punctulate; scutellar granules parted narrowly along the middle; elytra nearly four-fifths wider and more than a third longer than the prothorax, the sides evidently diverging from the base, rather strongly arcuate posteriorly, extremely minutely and somewhat sparsely punctulate throughout, not impressed on the suture basally; abdomen subparallel, rather wide, with nearly straight sides, posteriorly fully as wide as the elytra, very minutely, not very closely punctulate, the first impression with a few coarser but subobsolete punctures, the second and third gradually narrower and feebler, impunctate; legs very slender, the hind tarsi slightly shorter than the tibiae. Length 1.65 mm.; width 0.38 mm. Texas (Brownsville), — H. F. Wickham.

perexilis n. sp.

Form and coloration nearly similar throughout, slightly stouter, equally shining, the head nearly similar; antennae almost similar but rather stouter and more incrassate, the joints six to ten decidedly transverse, the tenth obviously longer than the ninth, the eleventh ogival, not as long as the two preceding together, second much longer than the third; prothorax larger, somewhat wider than long, the sides more angularly prominent before the middle, thence converging and broadly, feebly sinuate to the base, the surface less convex but similarly sculptured, the sulcus distinct, narrow and rather abruptly formed as in *perexilis* and ending behind in the same small deep fovea which is not wider than the sulcus itself; scutellar granules not parted along the middle; elytra longer and much broader but otherwise nearly similar, broadly and obsoletely impressed behind the scutellum, the punctures very fine, only moderately sparse, becoming close-set, larger and more asperulate near the inner basal angles; abdomen distinctly narrower than the elytra, parallel with evidently arcuate sides, the sculpture close-set but fine and feebly asperulate, the first impression with very few obsolescent coarser punctures, the second and third impunctate; hind tarsi much shorter than the tibiae. Length 1.65 mm.; width 0.42 mm. New York (Catskill Mts.),— H. H. Smith..**hudsonica** n. sp.

Perexilis is one of the smallest falagrioid species known to me within our faunal limits, but is more than equaled in this respect by some of the forms of *Melagria* and greatly surpassed by the next genus; it was found in some abundance by Mr. Wickham. *Hudsonica* is represented at present by a single specimen.

Aneurota Csy.

In its short tarsi, with more abbreviated basal joint than in any other type of the Falagriae now known to me, depressed and parallel form, large quadrate head, peculiarly impressed along the median line, short bristling hairs along the sides of the body and some other characters, this genus is wholly isolated in the present subtribe. That it belongs here, however, seems to be evident because of the very narrow neck, but I have been unable to break out the anterior coxae in the unique type and am therefore not positive concerning the structure of the concealed part of the prosternum. From glimpses between the anterior parts of the coxae in a strong light, with high magnifying power, it would seem that corneous plates exist under the latter and that they are slightly incomplete or rounded on the median line anteriorly, leaving a minute triangle of membrane exposed. A more detailed statement of its characters may be found under the original description — Ann. N. Y. Acad. Sci., VII, p. 347. The type may be described as follows: —

Form depressed, parallel, shining, dark piceous in color, the abdomen black, the legs pale testaceous; pubescence sparse; head large, parallel and

slightly arcuate at the sides, truncate and not at all arcuate at base, with narrowly rounded angles, the surface extremely sparsely and minutely, obsoletely punctulate, strongly impressed on the median line from the middle of the vertex to the front; antennae slightly longer than the head and prothorax, moderately thick, but feebly incrassate distally, the first three joints decreasing rapidly in length and thickness, the outer joints moderately transverse, the eleventh about as long as the two preceding together, pointed; prothorax very slightly longer than wide, somewhat shorter and very much narrower than the head, feebly convex, with a very fine and feeble impression along the median line almost from the apical margin to the base; sides anteriorly prominently rounded, thence moderately converging and straight to the base, which is fully three-fourths as wide as the disk; punctulation very minute and even but rather closer and more asperate than that of the head or elytra; scutellum flat, triangular, finely, sparsely, and evenly asperulate, with a wide flat and sculptureless border throughout; elytra quadrate, less than one-half wider and about two-fifths longer than the prothorax, about as long as wide, the sides very feebly diverging from base to apex and straight, the humeri scarcely rounded, angulate, moderately exposed at base; punctulation very minute, rather sparse and even throughout; abdomen much narrower than the elytra, widest at the apex of the fifth segment, feebly narrowed thence to the base, the sides straight, minutely, not very closely punctulate, the three impressions subequal, fine, rather deep and impunctate; legs short, rather slender. Length 1.35 mm.; width 0.3 mm. Florida.
sulcifrons Csy.

This extremely minute species is probably very local in distribution and of peculiar habits, possibly subcortical. My reference under the original description to a relationship with *Cardiola* is erroneous and was based solely upon the absence of an acute bead delimiting the hypomera.

Lissagria n. gen.

The very wide abdomen and elytra, in contrast with the comparatively narrow head and prothorax, gives to this genus a peculiar habitus which can be recognized at once. The detailed characters have been fully given in the table of genera and little can be added at present, except to draw attention to the marked homogeneity of the species, the general color, polished lustre and elytral sculpture, as well as the structure of the legs and antennae, varying scarcely at all throughout. The elytral sculpture consists of extremely minute, sparse and scarcely visible punctulation, which, toward the scutellum, becomes finely granuliform and very close-set, giving an alutaceous lustre in that vicinity. The scutellum is flat and rather strongly, closely granulose, the granules never parted along the middle so far as observed. *Lissagria* seems to be confined to the fauna of middle and southern California, west of the Sierras, and those forms worthy of distinctive names, whether true species or local variants, may be indicated as follows: —

Pronotal sulcus very deeply and conspicuously impressed, the surface along its sides very convex.. 2

Pronotal sulcus fine, though distinct, more abruptly formed, the adjoining surface feebly convex.. 5

2 — Head and prothorax equal in width or very nearly so................ 3

Head relatively larger, very much wider than the prothorax............ 4

3 — Form stout, rather convex, dark rufo-piceous with a very feeble subaeneous lustre, the head and elytra somewhat darker, the legs and antennae pale, testaceous, the latter feebly infuscate toward tip; vestiture anteriorly very short and indistinct, longer and coarser on the abdomen but very sparse; head orbicular, rounded at base, very minutely, sparsely punctulate, the front with a very feeble impressed transverse line between the antennae; eyes rather small, prominent; antennae long but not extending quite to the end of the elytra, moderately incrassate and compact distally; prothorax very slightly longer than wide, the sides rather broadly but prominently rounded anteriorly, thence moderately converging to the transversely truncate base, which is fully three-fourths as wide as the disk, the punctures fine but rather distinct, sparse posteriorly, closer anteriorly; transverse impression before the base rather fine, arcuate; elytra fully four-fifths wider and two-fifths longer than the prothorax, the coarse sutural beading slightly depressed behind the scutellum, the surface not impressed, the sides very feebly diverging from the well-marked humeri to the apex; abdomen parallel, feebly narrowed at tip, fully as wide as the elytra, finely, very sparsely punctulate, less sparsely toward apex, the three impressions subequal, narrow, rather deep, the first two with very few widely and unevenly spaced, coarse but feeble punctures, the third impunctate. Length 2.8 mm.; width 0.78 mm. California (Coast region to the south of San Francisco). [= *Falagria laev.* Lec.].
laeviuscula Lec.

Form and coloration nearly similar to the preceding; head and antennae nearly similar, the latter rather stouter distally, the transverse frontal groove broadly impressed; prothorax narrower, more distinctly elongate, the sides more broadly and less prominently rounded anteriorly, much less converging and straight to the base, which is broadly arcuate and four-fifths as wide as the disk, the punctures extremely fine and sparse throughout, much less distinct; elytra similar but more elongate, about twice as wide as the prothorax; abdomen parallel with slightly arcuate sides, similarly narrowed at tip, the sculpture similar, the third impression with a very few subobsolete coarse punctures. Length 2.9 mm.; width 0.8 mm. California (Giant Forest, Tulare Co.), — Chas. Fuchs............................**fissilis** n. sp.

4 — General form, coloration and structure as in the two preceding species, the head similar in form and in its sparse punctulation but with the transverse frontal impression deeper and more conspicuous, the antennae barely as stout and scarcely extending beyond the middle of the elytra; prothorax much smaller, longer than wide, the sides more broadly rounded than in *laeviuscula* and scarcely prominent, thence moderately converging and straight to the base, widest at apical two-fifths; sulcus very deep and wide, also broadening toward base, where it includes the entire transverse impression, the punctulation sparse throughout but unusually coarse, the punctures feebly impressed; elytra nearly twice as wide as the prothorax and two-fifths longer, the sides strongly diverging from base to apex, the punctulation as in the preceding species; abdomen fully as wide as the elytra, finely, sparsely punctulate, more asperate toward tip than usual, the impressions similarly subimpunctate. Length 2.5 mm.; width 0.7 mm. California (Sta. Cruz Mts.)....................................**impressifrons** n. sp.

5 — Body stout in form, convex, polished as usual, rather pale piceo-rufous, the head and most of the abdomen slightly darker, the legs and antennae pale testaceous, the latter very slightly infuscate distally; head as long as wide but rather fuller at the sides of the base than in *laeviuscula*, equally minutely, sparsely punctulate, the frontal impression very feeble; antennae nearly similar in form; prothorax but little longer than wide, slightly narrower than the head, the sides subangularly prominent at two-fifths from the apex, thence rather strongly converging and straight to the base, the surface very finely, sparsely and inconspicuously punctulate throughout, the transverse subbasal impression short but deep; elytra similar in form and sculpture to *laeviuscula*, four-fifths wider than the prothorax; abdomen similar in form and punctulation, the first impression with rather numerous coarser punctures, the second and third subimpunctate. Length 2.8 mm; width 0.8 mm. California (Sta. Cruz and Monterey Cos.)...............**robusta** n. sp.

Body stout, smaller and rather less stout than in *robusta* but of the same coloration and sculpture; head nearly similar, the antennae more slender, with the third joint evidently shorter than the second; prothorax nearly similar but smaller, narrower, not quite as wide as the head, rather less prominently rounded at the sides and widest at a point rather more apical, the impression more evidently broadening and deepening toward base, before which there is scarcely any transverse impression; elytra slightly narrower and less transverse, similarly sculptured, the abdomen nearly similar, equally sparsely but rather less distinctly punctulate. Length 2.3 mm; width 0.68 mm. California (Los Angeles Co.). **minuscula** n. sp.

Body more elongate and less stout than in *robusta* and differing somewhat in coloration, paler rufous, the head darker, the elytra, except toward base and the apical part of the abdomen blackish; legs and antennae pale testaceous, the latter slightly infumate toward tip; vestiture similarly inconspicuous; head smaller than in *robusta* and more evenly, circularly rounded from eye to eye, minutely, almost invisibly punctulate, the frontal impression feeble; antennae somewhat longer, the apical parts rather more rapidly incrassate; prothorax narrower, distinctly more elongate, equal in width to the head, the sides less angular and less prominent anteriorly, the puntulation similarly very minute, sparse and inconspicuous, the subbasal impression rather finer and more shallow; elytra nearly twice as wide as the prothorax and fully two-fifths longer, the sides rather more strongly diverging from base to apex, the minute punctulation extremely sparse but abruptly unusually dense and granuliform near the scutellum; abdomen nearly as in *robusta* throughout but somewhat narrower. Length 2.5 mm.; width 0.75 mm. California (Lake Co.)..................................**longicollis** n. sp

The unique type of *impressifrons*, described above, has the elytra singularly crumpled in large feeble folds, which is probably a deformity caused in drying after emergence from the pupa, but it is rather remarkable that the folds and depressions should be so perfectly symmetric bilaterally, each depression and each of the two long oblique folds of one elytron being perfectly matched on the other; the species can be known by the small prothorax and relatively large head, in addition to the coarse impressed punctulation of the former. The considerable series of *robusta* collected by Koebele and Harford in the Sta. Cruz Mts., is very homogeneous, and the two specimens from Los Angeles which I have separated under the name *minuscula*, although resembling it rather closely in general form and sculpture, are notably smaller in size. The measurement of length given in the original description of *Falagria laeviuscula* is undoubtedly an error; it is highly probable that no example of *Lissagria* ever attained the length of 3.5 mm., which is the dimension given by LeConte.

Falagriota n. gen.

The species of this genus are smaller, much more slender and frailer insects than those of *Lissagria* and have the sides of the prothorax very moderately converging toward base, with the median sulcus, so well developed in that genus, reduced to a very fine, obsolescent and wholly inconspicuous impression. The antennae are shorter, slender toward base but more incrassate distally, the scutellum more finely but evenly granulose and the elytra very minutely, rather sparsely punctulate throughout and not more closely or granularly so toward the scutellum. The abdomen is always more finely and closely punctulate. The remarkably small corneous plates of the prosternum have been previously referred to in sufficient detail, and this and other characters have been fully stated in the table of genera. Our seven species are readily separable into two distinct groups as follows:—

Elytra larger and more transverse, very much wider and always distinctly longer than the prothorax, the humeri widely exposed at base and moderately oblique..2

Elytra much smaller and narrower, never longer and much less distinctly, though very obviously, wider than the prothorax, the humeri narrowly exposed at base and more oblique; sides of the elytra rather more divergent from base to apex..5

2 — Prothorax widest and rather broadly rounded at the sides at or near apical two-fifths..3

Prothorax distinctly elongate, widest and strongly rounded at the sides much nearer the apex...4

3 — Form moderately slender, convex, polished, rufo-testaceous in color, the elytra rather more brownish, the abdomen with a very faint darker cloud, especially posteriorly; legs and antennae pale; pubescence rather abundant throughout but fine, short and pale, somewhat distinct; head slightly wider than long, broadly rounded at base, the sides becoming parallel for a short distance behind the eyes, the surface very minutely, sparsely and scarcely visibly punctulate, not impressed except very obsoletely on the median line toward base; antennae extending to basal third of the elytra, strongly incrassate distally, the subapical joints evidently transverse, the first three equal in length, the first slightly thicker; prothorax equal in width to the head, very slightly narrower in the male, convex, very finely and evenly punctulate, the punctules more asperate and closer than those of the head; sides distinctly convergent and straight posteriorly, the base broadly arcuato-truncate, fully four-fifths as wide as the disk; elytra two-thirds to three-fourths wider and two-fifths longer than the prothorax, not evidently impressed on the suture behind the scutellum, finely, not very sparsely and obviously punctulate, very evenly so throughout, the sides slightly diverging from base to apex; abdomen parallel with the sides distinctly, almost evenly arcuate, not quite as wide as the elytra, minutely, closely punctulate, less minutely, more sparsely and asperulately toward base, the first impression with numerous coarser punctures not very close-set, the other two with but few such punctures. Length 2.4 mm.; width 0.58 mm. California (Sta. Clara and Monterey Cos.). [= *Falagria occ.* Csy.]..**occidua** Csy.

Form nearly similar but more slender, similarly colored, the head relatively larger, excessively minutely, sparsely punctulate, the antennae somewhat less incrassate distally, the third joint slightly longer than the first; prothorax notably narrower and more elongate, very much narrower than the head, the sides broadly rounded anteriorly, similarly moderately converging and straight to the base, the punctulation still finer and sparser than in *occidua* and not evidently asperulate; elytra narrower though about four-fifths wider than the prothorax and much longer; abdomen similar but much more sparsely punctulate. Length 2.25 mm.; width 0.53 mm. California (Monterey Co.)....**lucida** n. sp.

Form more elongate and narrower than in *occidua*, the prothorax more elongate, rufo-piceous in color, the abdomen darker; legs pale, the antennae fuscous except at tip and toward base; vestiture short but close and rather distinct; head as in *occidua*, minutely and sparsely punctulate but having the punctures strongly asperate on the occiput; antennae nearly similar, the three penultimate joints decidedly transverse; prothorax very evidently elongate, not quite as wide as the head, the base four-fifths as wide as the disk, the sides rounded anteriorly; punctulation minute, rather sparse, very slightly asperulate; elytra but slightly transverse, four-fifths wider and two-fifths longer than the prothorax, the punctulation rather sparse and asperulate; abdomen distinctly narrower than the elytra, parallel with broadly arcuate sides, the sculpture close-set and distinctly asperulate, finely so posteriorly, coarsely and more sparsely toward base, the impressions differing from those of the allied species in having numerous somewhat coarser but feeble punctures, irregularly scattered and not in close contact. Length 2.5 mm.; width 0.55 mm. California (Los Angeles Co. — Pomona Mts.),— H. C. Fall..**asperula** n. sp.

Form still more slender and darker in color, blackish-piceous, the legs testaceous, the femora in large part piceous; antennae fuscous, paler at tip and toward base; pubescence inconspicuous; head wider than long, parallel at the sides behind the eyes, thence broadly rounded through the base, unimpressed, obsoletely and remotely punctulate; antennae nearly attaining the middle of the elytra, normally incrassate distally, the second and third joints long, equal, the first somewhat shorter and stouter; prothorax only very slightly longer than wide, somewhat narrower than the head, nearly as in *occidua* but rather more depressed and more finely, sparsely and obsoletely punctulate; elytra about three-fifths wider and two-fifths longer than the prothorax, only slightly wider than long, sparsely and very minutely punctulate; abdomen parallel with arcuate sides, as wide as the elytra, the sculpture scarcely at all asperulate, very sparsely punctulate throughout, extremely minutely so posteriorly, somewhat asperulately toward base, the first impression with but few widely spaced coarse punctures, the second with still fewer, the third impunctate. Length 2.25 mm.; width 0.5 mm. California (Los Angeles Co. — Pomona Mts.), — H. C. Fall........**picina** n. sp.

4 — Form slender, coloration as in *asperula*; head of the usual form, nearly as long as wide, broadly rounded at base, the sides becoming parallel for some distance behind the eyes; punctulation extremely fine, sparse, not much more distinct at base; antennae attaining the middle of the elytra, moderately incrassate distally, rather slender toward base, the two penultimate joints distinctly transverse, the first

joint somewhat shorter than the next two, which are equal as usual; prothorax distinctly longer than wide and evidently narrower than the head, the sides rather evenly rounded and subprominent apically, thence moderately converging and just visibly arcuate for a long distance to the base, the latter nearly four-fifths as wide as the disk, which is widest between apical third and fourth; punctulation extremely fine, sparse, scarcely at all asperulate, the sulcus all but obsolete; elytra nearly as in *occidua*, the punctulation sparse, extremely fine, not asperulate; abdomen parallel with broadly arcuate sides, not as wide as the elytra, sparsely, very finely punctulate throughout, scarcely at all asperulate, the basal impressions with but few coarser punctures, the third almost completely impunctate. Length 2.4 mm.; width 0.52 mm. California (Sonoma Co)............................**evanescens** n. sp.

5 — Body rather slender, strongly convex, polished, piceo-rufous, the abdomen and antennae slightly darker, the latter toward base and legs throughout pale testaceous; vestiture fine, subpruinose; head wider than long, broadly subtruncate at base with widely rounded angles, the sides parallel; punctulation sparse and obsolete, scarcely more visible at base; antennae nearly as in *occidua* but with the third joint slightly longer than the second, the three penultimate transverse; prothorax large, suboval, as wide as the head, longer than wide, widest at apical two-fifths, where the sides are broadly rounded and scarcely at all prominent, thence rather feebly converging and somewhat arcuate to the base, which is unusually arcuate and four-fifths as wide as the disk, the angles obtuse and slightly rounded; surface minutely, obsoletely and sparsely punctulate, the sulcus extremely fine and feeble; elytra relatively small, two-fifths wider and not at all longer than the prothorax, minutely, obsoletely punctulate; abdomen arcuate at the sides, widest somewhat behind the middle, where it is very obviously wider than the elytra, extremely minutely, somewhat closely punctulate and pubescent, the punctures very finely but abruptly asperulate throughout, the impressions with coarser but feeble punctures, some seven or eight in the first, the third impunctate. Length 2.7 mm.; width 0.67 mm. California (Humboldt Co.— Hoopa Valley).
collaris n. sp.

Body smaller and much more slender, rather less convex, similarly colored and pubescent; head nearly similar but smaller, more arcuate at base and broadly, obsoletely impressed along the median line basally, the punctulation similarly obsolete and sparse, becoming less sparse but asperulate on the occiput; antennae nearly similar, attaining the middle of the elytra; prothorax very slightly elongate, equal in width to the head, in outline as in *collaris*, the hind angles equally obtuse but scarcely rounded, the punctulation very fine, feebly asperulate and sparse, except rather broadly along the median line, where the surface becomes more broadly impressed than usual toward the very feeble sulcus and more closely and coarsely, asperately punctate; elytra very small, about a third wider than the prothorax and barely as long, the sides distinctly diverging from base to apex and very feebly arcuate, the punctures very fine, moderately close-set and somewhat distinctly asperulate; abdomen nearly as in *collaris*, with arcuate sides, much wider than the elytra, minutely, more densely and much more asperately punctulate, the three basal impressions polished but with rather numerous larger, though obsolescent, scattered punctures. Length 2.4 mm.; width 0.58 mm. California (San Bernardino Mts.), — H. C. Fall...**parvipennis** n. sp.

Of *occidua* I secured a large series, showing that the very pale coloration is a constant specific character; of *lucida* I have, however, only a single specimen; it is of equally pale color, but may be distinguished from the male of *occidua*, in which the prothorax is also very obviously narrower than the head, by the more elongate and narrower form of that part of the body, relatively much larger head and sparser abdominal sculpture. The species of this genus will doubtless prove to be numerous in California and perhaps also the coast districts to the northward.

There are two species described under the generic name *Falagria*, by LeConte, which I have not been able to place in the above revision; they may be described as follows from the published characters: —

Form elongate, subdepressed, densely punctulate, finely pubescent; head rectilinearly truncate at base, the neck obviously narrower than in *Tachyusa;* basal angles right and rounded; antennae fuscous, longer than the head and prothorax, slightly thickened externally but with the outer joints somewhat loose and not closely placed as they are in typical *Falagria*, the first three joints elongate as usual; prothorax slightly longer than wide, as wide as the head, obliquely truncate at each side of the apex, the sides converging slightly behind; base broadly rounded, the surface flattened, feebly but broadly channeled; elytra wider than the prothorax but not at all longer, the tip truncate, the outer angles acute; abdomen slightly narrowed at base, impressed as usual, the impressions impunctate, the surface smooth, paler toward base, the apex testaceous; legs testaceous, the basal joint of the hind tarsi not as long as the three following combined, the latter diminishing slightly in length. Length 3.5 mm. Lake Superior.................**vaga** Lec.

Form depressed, piceous-black, the abdomen piceous; legs and basal parts of the antennae testaceous; shining, finely pubescent; head large, parallel, the base broadly truncate with the angles rounded, sparsely punctulate, with an impressed frontal fovea, the occiput briefly canaliculate; antennae not longer than the head and prothorax and less slender than usual, but slightly thickened distally; prothorax trapezoidal, moderately narrowed behind, somewhat shorter than wide, punctulate, deeply canaliculate; scutellum punctulate, not at all canaliculate; elytra wider than the prothorax, closely punctulate, piceo-testaceous; abdomen very finely punctulate, broader and flatter than usual, and scarcely narrowed toward base, the first three tergites impressed as usual, the impressions impunctate; posterior tarsi two-thirds as long as the tibiae, with the first joint as long as the three following combined, the latter subequal. Length 3.5 mm. New York, found under a stone. **quadriceps** Lec.

It is rather more than probable that each of these species will prove to be the type of a distinct genus, apparently different from any defined in the above tables. *Vaga* belongs, without much doubt, to the subtribe Tachyusae and may be attached provisionally to the genus *Gnypeta*, some of the components of which have the neck rather strongly constricted. *Quadriceps*, on the other hand, is almost certainly a member of the subtribe Falagriae, where it is wholly isolated; it may take the generic name **Orthagria** (n. gen.) and be placed just before the genus *Lissagria* in the table of genera. In each case the published length of the body is probably excessive. *Tachyusa pygmaea*, of Sachse, has been identified as the European *Mymecopora crassiuscula* Aub., by Mr. Fauvel; I have now no example of it, but, if this is true, it should be removed from our lists.

Tribe BOLITOCHARINI.

In this tribe the tarsi are 4–4–5-jointed throughout, but, apart from this distinguishing character, there is great structural variety, some forms recalling correspondingly specialized groups in other tribes, as usual under the tarsal system of classification. There are numerous subtribes, such as the Autaliae, composed of the genus *Autalia* alone, recalling the Falagriae of the Myrmedoniini and the Echidnoglossae of the Aleocharini, the Bolitocharae, with rather numerous genera, represented by a multitude of fungus-loving species, the Homalotae, consisting of the genera *Homalota* Mann.— (= *Epipeda* Rey) — and *Placusa*, the Gyrophaenae, as described below, and the subtribe Phytosi, distinguished by its comparatively large number of highly specialized genera, there being a separate genus for almost every known species. The

American genera of Phytosi are *Bryobiota*, *Thinusa*, *Bryothinusa*, *Amblopusa*, *Diaulota* and *Liparocephalus*, the European being *Phytosus*, *Actocharis*, *Actosus* and *Arena*. They inhabit ocean beaches in various parts of the northern hemisphere, being especially abundant on the western coast of America, but extremely rare on the nearctic Atlantic coast, the single species described by Dr. Horn, under the name *Phytosus littoralis*, being unknown to me at present; it is possibly not a true *Phytosus*.

Subtribe **Bolitocharae.**

This is probably the largest subtribe of the Bolitocharini and is apparently more developed in the palaearctic than in the nearctic regions, owing to the very large number of minute obscure species of *Sipalia*, which genus is exceedingly rare in America, the somewhat aberrant *Sipalia frontalis* Csy., of California, being the only one described thus far. This deficiency is, however, made up largely by the greater number of American species allied to *Bolitochara*, although that genus itself does not occur here. There are two tolerably well defined groups of the subtribe Bolitocharae, the first characterized by a broader obtuse mesosternal process, narrower and more acute however in *Stictalia*, and more elongate basal joint of the hind tarsi, the second having an acute process and shorter basal joint, generally but little longer than the second, though as long as the next two combined in *Euryusa*, and comprising in addition thereto, the genera *Silusa*, *Leptusa*, *Sipalia* and others which will not be systematically discussed in the present paper. The antennae are variable in the first group but are always gradually thicker to the tip in the second. The Bolitocharae, as a group, have a readily recognized facies owing to their coarse asperate sculpture, and, as far as known to me, live exclusively in fungi of various species, frequently in enormous numbers.

The genera of the first group indicated above may be briefly defined as follows: —

Prothorax distinctly narrower than the elytra; antennae gradually thicker to the apex.. 2

Prothorax broader and more transverse, subequal in width to the base of the elytra; infra-lateral carinae of the head distinct and entire...... 4

2 — Infra-lateral carinae of the head wholly obsolete except for a short distance anteriorly; neck narrower than in any other genus of the subtribe, slightly less than half as wide as the head; mesosternal process moderately wide, obtuse, somewhat free and not attaining the metasternal projection; prosternum before the coxae and posterior part of the mesosternum finely and acutely carinate along the middle; basal joint of the hind tarsi about as long as the next two combined; pronotal punctures normal, coarser, not asperate. Europe..***Bolitochara**

Infra-lateral carinae distinct and entire; neck wider, always more than half as wide as the head... 3

3 — Head strongly narrowed behind the eyes, the neck about two-thirds as wide; hypomera shorter, coming far from attaining the anterior limits of the prothorax; mesosternal process only moderately narrow and more obtuse, almost attaining the metasternal projection; basal joint of the hind tarsi not as long as the next two combined; pronotal punctures simple and impressed, not asperate. Europe.......***Ditropalia**

Head feebly narrowed behind the eyes, the neck very broad; hypomera more elongate, almost attaining the anterior limits of the prothorax; mesosternal process narrow, subacute and freer at tip, the latter separated from the metasternal projection by a much greater longitudinal discontinuity; basal joint of the hind tarsi much more elongate, sometimes subequal to the next three combined; pronotal punctures always very fine and granuliform or asperate; eyes similar, moderate in size and prominent. Nearctic Pacific coast regions..................**Stictalia**

4 — Antennae gradually thicker distally as in the preceding genera; head not materially narrowed behind the prominent eyes, the neck very wide; hypomera visible from the sides as in all the other genera of the subtribe, attaining the apex of the prothorax; sides of the latter feebly rounded and not at all sinuate toward base; antennae short, the outer joints strongly transverse; pronotal punctures minute and asperulate...5

Antennae not or scarcely thicker externally, the last seven or eight joints forming a loose parallel-sided club; head, hypomera and sculpture similar, the infra-lateral carinae unusually acute and very strongly elevated; sides of the prothorax very feebly sinuate toward base, the basal angles more distinct...6

5 — Mesosternal process broad anteriorly, rapidly narrowed, its apex narrowly rounded or subacute, free and separated from the metasternal projection by a considerable longitudinal discontinuity; basal joint of the hind tarsi scarcely as long as the next two combined. Europe. *** Phymatura**

Mesosternal process longer, narrow and more parallel, free and rounded at tip, virtually attaining the apex of the metasternal projection; basal joint of the hind tarsi fully as long as the next two combined. Nearctic Atlantic regions...**Silusida**

6 — Fourth antennal joint small, about as wide as the preceding joints and very much smaller than those which follow; intermesocoxal parts nearly as in *Bolitochara*, the process varying from moderately wide to rather

narrow; hypomera long and well developed; head short and moderately narrowed behind the eyes, which are large and prominent; neck very broad; pronotal punctures fine and asperate; tarsi very slender, the basal joint of the posterior as long as the next two combined or longer. Nearctic Atlantic regions....................................Venusa

Fourth antennal joint large, wider than the preceding joints and subsimilar to those which follow; general form of the body as in *Venusa*, the pale maculation of the elytra usually more distinctly defined, the pronotal punctures less asperate and nearly simple; head, eyes, neck and hypomera nearly similar, the mesosternal process broader, very obtuse at tip, almost attaining the metasternum; tarsi rather less slender, the basal joint of the posterior barely as long as the next two combined. Nearctic Atlantic regions.............................. ...Pleurotobia

In addition to the two characters previously mentioned which distinguish these genera of the first group from *Silusa*, *Leptusa* and others of the second group, it should be said that the elytra here are always variegated with dark or black and pale tints, the humeri at least being invariably paler than the external apical parts, but, in the second group, the coloration of the elytra is uniform, any variegation being feebly developed and exceptional. The three exclusively foreign genera of the table may be remarked upon as follows: —

BOLITOCHARA Mann. — This genus may be recognized at once by the obsolete infra-lateral carinae of the head, so universally developed elsewhere in the subtribe, except in certain very slender and almost blind species of *Sipalia*, such as *flava* Kr., *plicatella* Fauv. and *bituberculata* and *arida* Epp., which, because of the narrow subelongate head, frequently very minute subfacetless eyes and complete absence of the infralateral carinae should be generically separated from *Sipalia*, and for which I would propose the generic name **Typhlusida**. With this virtual absence of the carinae in *Bolitochara*, occurs the seemingly correlated narrow neck, which is wholly foreign to any of the American genera. *Bolitochara*, as here restricted, is represented by such European species as *lunulata* Payk., and *lucida* Grav.

DITROPALIA n. gen. — The complete infra-lateral carinae of the head is a perfectly constant and very important character, separating this genus from *Bolitochara*. The head behind the eyes is, however, more strongly narrowed and more elongate than in any of the American genera, and the neck is correspondingly narrower, though much wider than in *Bolitochara.* The genus *Ditropalia* is founded upon the European *Bolitochara bella* Märk., *obliqua* Er., *mulsanti* Shp., and other allied species and appears to be confined to the palaearctic fauna.

PHYMATURA J. Sahlb. — The single known representative of this genus appears to be a somewhat rare insect. It greatly resembles our *Silusida* and *Venusa* in its broad prothorax, but differs very much in its shorter and more triangular mesosternal process, which is very broad at its base but acutely rounded at tip, differing from the corresponding part in *Bolitochara* also in the absence of any trace of carina. The type is *brevicollis* Kr.

Stictalia n. gen.

The species of this genus are numerous but rather closely allied among themselves, inhabiting various parts of the region immediately contiguous to the Pacific Ocean, from southern California to Alaska. They are smaller and much less conspicuous than the less numerous and, in all probability, individually less abundant species of the European genera *Bolitochara* and *Ditropalia*, and are intermediate in some characters between those genera and *Venusa* and the European *Phymatura*, having the gradually enlarged antennae of the former and the sculpture of the latter. The coloration of the abdomen seems to be constant, enabling us to separate the species into two unequal primary groups as follows:—

Abdomen pale, with a large subapical black cloud, the dark coloration generally extending to the base of the abdomen along the median basal parts of the tergites 2
Abdomen black throughout, the tergites toward base paler along their apical margins especially toward the sides 8
2 — Pronotum impressed at each side of the median line toward base, the impressions transversely connected slightly before the basal margin.. 3
Pronotum with a short transverse impression before the basal margin but not otherwise impressed 7
3 — Fourth antennal joint only very slightly longer than wide.......... 4
Fourth antennal joint much elongated 6
4 — Three basal tergites deeply impressed at base, the impressions notably

more coarsely and sparsely punctured than the remainder of the surface, which is not very closely or coarsely punctate; pronotal impressions only visible behind the middle and converging toward base. Body rather stout, convex, feebly shining, pale rufo-testaceous, the head piceous, the elytra blackish externally toward tip, the legs and antennae pale, the latter very slightly infuscate distally except at tip; integuments minutely but strongly reticulate, feebly so on the elytra, the abdomen excessively minutely and feebly reticulate in subtransverse broken lines; head wider than long, the sides behind the eyes short, parallel for some distance, then strongly rounded to the neck, the punctures rather distinct, moderately close; antennae gradually stout distally, but little longer than the head and prothorax, the subapical joints rather strongly transverse, fully three-fourths wider than long; prothorax slightly wider than the head, nearly a third wider than long, parallel, the sides arcuate, becoming feebly sinuate before the obtuse but very distinct basal angles, the surface strongly, asperately and moderately closely punctured, the impressions distinct; elytra a third wider and nearly one-half longer than the prothorax, the truncate apex deeply sinuate externally as usual, the surface strongly, asperately and somewhat closely punctured, the pubescence short, somewhat sparse but coarse, pale and distinct. Length 3.3 mm.; width 0.82 mm. Alaska (Fort Wrangel). [=*Bolitochara not.* Mäkl.]................**notata** Mäkl.

Three basal tergites less deeply impressed and with punctuation which differs but little from that of the remainder of the tergites; pronotal impressions parallel.. 5

5 — Form more slender than in *notata* but similarly alutaceous in lustre anteriorly, with the integuments minutely reticulate, less so on the elytra, the abdomen very obsoletely so, testaceous, the head and prothorax slightly darker and more piceous than the elytra, the latter each with a large and irregular infumate spot externally in apical two-thirds, not attaining the apex; legs and antennae as in *notata*; head nearly similar, the punctures finer and less distinct; antennae longer and notably less stout, the subapical joints moderately transverse; prothorax more distinctly wider than the head, two-fifths wider than long, parallel and arcuate at the sides, becoming feebly sinuate before the basal angles as usual, the surface finely and very closely, asperately punctured, the two longitudinal impressions extending almost to the apex though very feebly and broadly impressed; elytra two-fifths wider and fully one-half longer than the prothorax, the asperate punctures much less coarse than in *notata* and very close-set; abdomen much narrower than the elytra as usual, the punctures rather sparse and unusually inconspicuous throughout. Length 3.1 mm.; width 0.76 mm. British Columbia....................................**densicollis** n. sp.

Form nearly similar to the preceding but still less stout anteriorly, the coloration also similar, except that the head alone is slightly darker than the prothorax and elytra, the integuments much more shining, polished, the reticulation everywhere obsolete; head and antennae similar, the punctures less close-set; prothorax shorter and more transverse, slightly wider than the head, not quite one-half wider than long, equally finely but less closely punctured, the impressions only visible behind the middle; elytra nearly as in *densicollis* but with the humeri slightly more exposed at base and the punctures coarser, more asperate and less close-set, more nearly as in *notata;* abdomen as in *densicollis* but with the punctures toward base notably coarser and conspicuously close throughout the extent of the tergites. Length 3.0–3.3 mm.; width 0.73–0.8 mm. California (Humboldt Co.). [=*Bolitochara calif.* Csy.]..**californica** Csy.

6 — Form rather stout, convex, shining, not at all reticulate, dark castaneous, the elytra pale testaceous, blackish externally toward tip; abdomen very dark rufous throughout except subapically; head longer than usual, about as long as wide, strongly and closely punctate; antennae rather slender, only moderately incrassate distally, extending to about basal third of the elytra, the subapical joints moderately transverse; prothorax unusually elongate, about a fourth wider than long, convex, distinctly wider than the head, broadly rounded at the sides just before the middle, finely, rather closely, asperately punctured, the impressions short, feebly converging, only visible behind the middle; elytra nearly one-half wider and longer than the prothorax, unusually, coarsely, very asperately and not very closely punctured, the humeri rather well exposed; abdomen narrower than the elytra, unusually tapering almost from the base to apex, the punctures unusually coarse, close-set and even, sparser and finer toward tip as usual. Length 2.7-3.0 mm.; width 0.78–0.83 mm. California (locality unrecorded)...**punctiventris** n. sp.

Form less stout, similarly polished and devoid of reticulation, paler, castaneous, the elytra rufous, blackish externally toward tip, the abdomen much paler than in *punctiventris*, with the usual black subapical cloud but with the segments thence to the base blackish at the middle, the legs very pale; head almost as in the preceding but more finely and sparsely punctate, the antennae shorter, much more rapidly and strongly incrassate distally, the subapical joints strongly transverse, the fourth less elongate; prothorax more transverse, a third wider than long, distinctly wider than the head, more feebly and less closely, asperulately punctate, the impressions similarly only distinct near the transverse impression; elytra narrower, less transverse, almost as long as wide, almost as coarsely and asperately punctate, the punctures very slightly more numerous; abdomen more parallel, much narrower than the elytra, the punctures much finer and sparser, more distinct but still sparser in the basal impressions. Length 3.0 mm.; width 0.73 mm. California (Mendocino Co.)............................**aspera** n. sp.

Form more slender and parallel than in *aspera*, the elytra relatively smaller than in any other species; coloration nearly similar, the pale basal parts of the abdomen without distinct medial blackish maculation; integuments not minutely reticulate, polished; head and antennae as in *aspera*, the punctures stronger and closer toward base; prothorax less transverse, about a fourth wider than long, only very slightly wider than the head, the punctures small but strongly asperate, moderately close-set; impressions very short and feeble; elytra about a third wider and two-fifths longer than the prothorax, rather more coarsely and asperately punctured than in any other species, the punctures well separated; abdomen subparallel, narrowed toward tip, less distinctly narrower than the elytra than in *aspera*, punctured almost as in *punctiventris*, the punctures coarse and close-set throughout the extent of the tergites toward base. Length 2.75 mm.: width 0.7 mm. California (Sta. Cruz Mts.)..**rugipennis** n. sp.

7 — Body moderately slender, subparallel, shining, black, the elytra each obliquely rufous from the humerus to the suture behind the middle; the abdomen rufescent toward base; integuments very obsoletely micro-reticulate anteriorly; head well developed, somewhat wider than long, the antennae short, but little longer than the head and prothorax, rapidly and distinctly incrassate and blackish distally, though less stout than in *rugipennis*, the apical joint not paler, the penultimate joints strongly transverse, the fourth distinctly elongate; prothorax but slightly wider than the head, about a third wider than long, convex, finely, asperately punctate, closely so along the middle, more sparsely laterally, the transverse subbasal impression narrow, straight and very feeble; elytra but slightly wider than long, two-fifths wider and fully one-half longer than the prothorax, the humeri moderately exposed at base, the punctures relatively rather small, feebly asperate and distinctly separated; abdomen parallel, almost as wide as the elytra, rather strongly and coarsely, evenly, moderately closely punctured toward base. Length 2.7 mm.; width 0.78 mm. California (Sta. Cruz Mts.)........................**obsolescens** n. sp.

Body smaller and somewhat stouter, parallel, shining, piceo-rufous, the elytra blackish, broadly flavate toward the humeri and narrowly along the suture posteriorly, the abdomen pale toward base, especially at the the sides of the dorsal plates; legs pale, the antennae blackish except toward base, the apex not paler; head wider than long, well developed, parallel, abruptly constricted at base, finely, sparsely and obsoletely punctulate, the antennae short, strongly incrassate, the penultimate joints strongly transverse, the fourth scarcely longer than wide; prothorax notably transverse, rather more than one-half wider than long, slightly wider than the head, and, like the latter, minutely and feebly reticulate, finely, not closely and inconspicuously punctulate, the transverse subbasal impression unique in being long and anteriorly arcuate; elytra but slightly transverse, about a fourth wider and one-half longer than the prothorax, finely, rather closely and not very strongly punctured; abdomen but little wider than the prothorax, parallel, finely and only moderately closely punctate. Length 2.3 mm.; width 0.7 mm. British Columbia (Victoria)............**arcuata** n. sp.

8 — Pronotum with two broad and very feeble longitudinal impressions tranversely united before the base and obsolete anteriorly well before the middle. Body moderately stout, somewhat strongly convex, shining, black, the elytra rather bright red, blackish about the scutellum and broadly toward the sides except in basal third and along the apical margin; basal tergites slightly paler at apex; legs pale, the antennae fuscous, much paler toward base and slightly at the apex; head and pronotum very obsoletely micro-reticulate, the former only moderately large, transverse, with prominent eyes, the punctures rather strong and close-set toward base; antennae extending almost to the middle of the elytra, moderately incrassate distally, the penultimate

joints about one-half wider than long, the fourth as long as wide; prothorax much wider than the head, fully a third wider than long, finely, but strongly, asperately and closely punctate; elytra nearly quadrate, a third wider and a half longer than the prothorax, the punctures strongly asperate, moderately large and rather well separated; abdomen narrower than the elytra but broader than the prothorax, parallel, feebly narrowing toward apex, rather strongly and closely punctate toward base. Length 2.4–3.0 mm.; width 0.72–0.78 mm. California (mountains near Claremont, San Mateo, Pomona and Calaveras Co.),— Mr. C. F. Baker and others............**bakeri** n. sp.

Pronotum impressed as in *bakeri*. Body stout, moderately convex and shining, pale piceo-castaneous in color, the elytra each with a broad flavescent area from the region of the humerus to the suture in apical half or more, the apical margin also pale, especially toward the sides; abdomen blackish, pale at tip and nubilously so at the apices of the first two or three tergites; head large, as long as wide, strongly and closely punctured, finely and sparsely so on the front, the antennae blackish, piceous toward base, rather short and compact, but little longer than the head and prothorax, the fourth joint slightly elongate, the outer joints rapidly and strongly incrassate, the tenth almost twice as wide as long; eyes rather small; prothorax large, distinctly wider than the head, fully two-fifths wider than long, widest slightly before the middle, the sides moderately arcuate, the punctures strong, close-set and asperulate, the interstices feebly micro-reticulate; elytra scarcely a third wider and nearly one-half longer than the prothorax, the humeri only very narrowly exposed at base, the punctures coarsely asperate and rather close-set; abdomen at base distinctly narrower than the elytra, thence sensibly attenuate to the apex, the punctures rather fine, asperate and sparse throughout; legs pale, moderately stout. Length 2.5 mm.; width 0.78 mm. California (locality unrecorded..**collaris** n. sp.

Pronotum with the usual short transverse subbasal impression, which is only very briefly or not at all extended anteriorly at its sides......... 9

9 — Abdomen gradually and very distinctly tapering almost from the base to the apex, the antennae long. Body moderately stout and convex, black, the elytra obliquely red from the humeri to the posterior half of the suture; legs pale, the antennae blackish, slightly paler toward base but not at apex; head nearly as long as wide, suborbicular, somewhat narrowed behind the rather inconspicuous eyes, finely punctured, minutely reticulate, the antennae long, rather loose, almost attaining the middle of the elytra, moderately incrassate distally, the fourth joint much elongated, the sixth as wide as long, the tenth scarcely one-half wider than long; prothorax minutely and feebly reticulate, very much wider than the head, two-fifths wider than long, very minutely, not densely and inconspicuously asperate; elytra nearly as long as wide, about one-half wider and two-thirds longer than the prothorax, finely, closely, subasperately punctate; abdomen at base slightly narrower than the elytra but much wider than the prothorax, finely, not very closely punctate, the impressions feebly and sparsely so. Length 3.0 mm.; width 0.8 mm. California (Mokelumne Hill, Calaveras Co), — F. E. Blaisdell.................................**laxicornis** n. sp.

Abdomen subparallel, feebly narrowed toward tip; the antennae shorter. 10

10 — Form moderately stout, not very convex, shining, the head and pronotum minutely, feebly reticulate, black or piceous-black, the elytra pale at the humeri, narrowly at apex near the sides and narrowly along the suture posteriorly; legs pale, the antennae blackish, slightly paler toward base but not at apex; head transverse, slightly narrowed behind the eyes, finely, sparsely punctulate, more closely along the base and sides; antennae moderately incrassate distally, attaining basal third of the elytra, the fourth joint rather distinctly longer than wide, the fifth very nearly as long as wide, the outer joints distinctly but not strongly transverse; prothorax much wider than the head, a third wider than long, the sides strongly sinuate toward base, the angles but slightly more than right, the punctures minute, asperulate and not very close-set; elytra rather large, nearly one-half wider and three-fourths longer than the prothorax, somewhat depressed, finely, closely punctured and only feebly asperulate; abdomen much narrower than the elytra and but little wider than the prothorax, the apices of the first two tergites pale laterally, the punctures fine and moderately close, the impressions deep. Length 2.75 mm.; width 0.78 mm. California (Humboldt Co.). [=*Bolitochara nig.* Csy.]........**nigrina** Csy.

Form and sculpture nearly similar to the preceding, smaller, pale piceous, the elytra flavo-testaceous, broadly piceous-black toward the external apical angles, except at tip, and also about the scutellum; abdomen black, the first three tergites pale at the sides almost throughout their length; legs pale, the antennae dusky, paler toward base but not at tip; head nearly as in *nigrina* but relatively larger, minutely, sparsely punctulate, the antennae much shorter, more rapidly and strongly incrassate distally, but slightly longer than the head and prothorax, the fourth joint as long as wide, the fifth distinctly and the penultimate strongly transverse; prothorax but slightly wider than the head, nearly as in *nigrina* but less strongly sinuate at the sides toward base, the angles more obtuse; elytra nearly similar in form and in their fine close sculpture; abdomen nearly similar in form and sculpture. Length 2.4–2.6 mm.; width 0.68–0.7 mm. California (Humboldt Co.).
brevicornis n. sp.

Form similar, the size still smaller, similarly minutely reticulate anteriorly, shining, colored as in *brevicornis*, the basal tergites pale at the sides of their apices; head transverse, subparallel at the sides, abruptly constricted at base, finely, sparsely punctulate, the antennae rather short, rapidly and strongly incrassate distally, the fourth joint obviously longer than wide, the fifth nearly as long as wide, the tenth about three-fifths wider than long; prothorax nearly as in *brevicornis* but more distinctly wider than the head; elytra nearly similar in form but much more coarsely punctate, the punctures well separated; abdomen much more coarsely and rather more closely punctured, the impressions scarcely as deep. Length 2.0–2.2 mm.; width 0.67 mm. California (locality unrecorded)....................................**minor** n. sp.

The sexual characters in this genus are rather feeble but readily observable, the male having the ordinary sparse punctures of the fifth and sixth tergites modified into coarse and elevated, subelongate asperities, usually with one more distinct at the centre, and in some cases as in *bakeri* and *laxicornis*, another at each side more apical on the fifth tergite, and the sixth sinuate at tip, with porrect asperities, each bearing a short stiff bristle, about the contour of the sinus, the female having the punctures throughout minute and but feebly asperulate, with the sixth tergite simple at the apical margin and sinuato-truncate. In *nigrina* the central tubercle of the fifth tergite is very small and slightly elongate, those more posterior being scarcely distinct and in *brevicornis* it is similar, but in the former the sinus of the sixth tergite is coarsely serrulate, while in the latter the serrulations are extremely minute and sparser. In *minor* the central tubercle is very minute and scarcely elongate. In *californica* the median tubercle is before the centre and scarcely larger than several of the others. There is but little diversity in these sexual characters, so that it is scarcely necessary to describe them in each instance.

Silusida n. gen.

This genus is represented thus far by two species, one at least very abundant in individuals, both small in size and of rather dull lustre. They resemble *Venusa* in general form, but may be distinguished at once by the short, strongly and gradually incrassate antennae and by the feebly rounded sides of the prothorax toward base, with less distinct basal angles; they may be described as follows: —

Form rather stout, somewhat depressed, parallel, feebly shining, the pubescence pale, very short but abundant and distinct, pale flavo-testaceous in color, the head, median parts of the prothorax, elytra toward the external apical angles, except along the apex, and abdomen from about basal third to the middle of the fifth segment, blackish; legs pale, the antennae slightly dusky; head and prothorax very minutely and obsoletely reticulate, the former small, transverse, with rather large prominent eyes, minutely, sparsely punctulate, the antennae scarcely longer than the head and prothorax, rapidly and strongly incrassate, the second joint much longer than the third, both slender and elongate, four to ten very strongly transverse, greatly increasing in width and perfoliate; prothorax fully three-fourths wider than long, very much wider

than the head, broadly arcuate at base, minutely, asperately and moderately closely punctate, broadly, feebly impressed in the middle before the base; elytra at base equal in width to the prothorax, at apex but little wider, one-half longer, slightly transverse, finely, feebly and closely punctate, each somewhat obliquely impressed behind the scutellum; abdomen much narrower than the elytra, gradually tapering almost from the base, finely, closely and almost evenly punctured, more sparsely posteriorly, the basal impressions rather narrow and feeble. Length 2.2–2.5 mm.; width 0.7–0.75 mm. New York (Catskill Mts.) and Pennsylvania (near Philadelphia). [=*Bolitochara marg.* Csy.].
marginella Csy.

Form slender, much smaller in size, dull in lustre and similarly sculptured, the punctuation throughout fine, asperulate and close-set, pale brownish flavate in color, the head piceous, the elytra scarcely at all darker at tip, the abdomen with a piceous cloud involving the fourth tergite; head convex, well developed, the antennae stout, fuscous, paler toward base, scarcely longer than the head and prothorax, strongly incrassate distally, the outer joints rather compactly joined and strongly transverse; prothorax about a third wider than the head and less than one-half wider than long, convex, not distinctly impressed, subparallel with the sides broadly arcuate, the base rounded; elytra slightly transverse, equal in basal width to the prothorax and about a third longer, the humeri not at all exposed, the suture slightly impressed behind the scutellum; abdomen obviously narrower than the elytra, subparallel, finely, very sparsely punctured, the vestiture much longer and coarser. Length 1.35 mm.; width 0.45 mm. Pennsylvania (near Philadelphia).
nanella n. sp.

The male of *marginella* has a very small rounded tubercle on the median line of the fifth tergite, at some distance from the apex, with the punctures not more conspicuously asperate than on the other tergites, the sixth having a similar but more elongate flattened discal tubercle and the apex broadly sinuate throughout the width, the edge having six or eight serrulations not continued onto the disk. In *nanella* the abdominal sculpture throughout is very much sparser than in *marginella* and the tubercle of the fifth tergite is rather larger, more elongate and nearer the apex, with the sparse punctures elongato-asperate, the sixth being narrower and sinuato-truncate at tip, with four rather strong rounded denticles continued forward onto the surface by convex longitudinal ridges, the surface anteriorly in great part covered by the fifth tergite in the unique type.

Venusa n. gen.

In the general form and sculpture, as well as coloration of the body, the species of *Venusa* closely resemble *Stictalia*, but they differ in three important features, the first relating to the structure of the antennae, which do not gradually increase in thickness to the tip but are slender at base, with the outer seven joints forming a long and loose, nearly parallel-sided club, the second being the much wider and more transverse prothorax, imparting a notably different facies to the anterior part of the body, the third concerning the sexual characters of the male, the punctures of the fifth and sixth tergites, as in *Silusida*, not being notably or more coarsely asperate and both having a large conspicuous, though unentire, obtusely rounded ridge along the median line; the sixth is, however, similarly sinuate or sinuato-truncate at tip and armed with porrect denticles throughout the width. The species are not very numerous, closely allied among themselves and swarm individually in great numbers in almost every mushroom that has passed its prime, resembling in this way the allied genus *Pleurotobia;* they may be described as follows: —

Antennae stouter, the penultimate joints much wider than long. Body stout, parallel, convex, shining, black or blackish, the basal margin of the prothorax pale, the elytra pale flavo-testaceous, slightly dark near the scutellum and broadly toward the external angles; abdomen bright red, the fifth tergite and basal half of the sixth black; legs pale, the antennae blackish, pale toward base; head wider than long, rapidly narrowed behind the eyes, which are well developed and finely faceted, the punctures fine, rather sparse; antennae attaining basal third of the elytra; prothorax three-fourths wider than long, slightly less than one-half wider than the head, rounded at the sides, the latter becoming subparallel toward base, the surface finely, asperately and closely punctate, with a large feeble binary impression at the middle before the base; elytra wider than long, very slightly wider and one-half longer than the prothorax, impressed at each side of the suture for about half the length behind the scutellum, rather finely, closely but asperately punctate, the humeri scarcely at all exposed at base; abdomen much narrower than the elytra, somewhat tapering from near the base to the apex, rather finely but strongly, closely and asperately punctate, the impressions rather narrow, moderately deep and somewhat more coarsely and sparsely punctate. Length 2.6 mm.; width 0.82 mm. New York (near the city) to Iowa………………**picta** n. sp. (Fvl. MS.).

Antennae slender, the penultimate joint very nearly as long as wide......2

2 — Antennae long, extending nearly to the middle of the elytra; form, coloration and sculpture nearly as in *picta* but more slender, the head black, the prothorax piceous, paler along the basal margin, the elytra generally infumate everywhere except toward the humeri; head small; prothorax three-fourths wider than long, broadly rounded at the sides and narrowed anteriorly, the sides distinctly converging toward base, the latter broadly arcuate, becoming sinuate near the angles as usual, the subbasal impression fine, transverse and bisinuate, feebly, anteriorly bifurcate at the middle; elytra slightly wider and scarcely one-half longer than the prothorax, impressed and punctured nearly as in *picta*, the humeri slightly more exposed at base; abdomen nearly similar but with each of the pale basal tergites more distinctly infumate at the middle of the base. Length 2.6–3.0 mm.; width 0.75-0.78 mm. New York (Catskill Mts.) to Iowa (Iowa City). [=*Bolitochara bl.* Csy.]. **blanchardi** Csy.

Antennae shorter and less developed, scarcely extending to basal third of the elytra; form, coloration and sculpture nearly as in *blanchardi* but smaller in size, and, in general, of darker color, the prothorax more blackish and scarcely at all paler along the base, the subbasal double impression larger and more distinct; elytra always black except broadly toward base, the dark color also involving the scutellum as a rule, the form and sculpture as in *blanchardi*; abdomen similar to the latter throughout. Length 2.7 mm.; width 0.77 mm. Missouri (St. Louis) and Iowa...**laetula** n. sp.

These species are very closely allied among themselves, presenting difficulties in classification similar to those well known in *Sericoderus*, of the Corylophidae. In *blanchardi* the medial, transversely convex carina of the fifth tergite extends anteriorly but little beyond the middle of the plate, and, posteriorly, nearly to the apical margin, the sixth tergite being broad at tip and only very feebly sinuate, or more properly sinuato-truncate, with the edge finely serrulate as usual. The species are all very abundant as before remarked.

Pleurotobia n. gen.

In most of its characters, as well as general habitus and ornamentation, this genus agrees very well with *Venusa*, but it differs rather radically in the fact that the third antennal joint, instead of being small and forming a part of the slender basal part, is here large, similar to the succeeding joints and similarly sculptured and pubescent; the basal joint of the hind tarsi, also, is notably less elongate. The species live in fungi associated with *Venusa*, but are scarcely so numerous individually; the three in my cabinet at present may be readily known as follows: —

Predominating color black or blackish................................2
Predominating color pale..3
2 — Form stout, parallel, rather convex, polished, black, elytra testaceous near the humeri and very narrowly on the suture posteriorly, the abdomen feebly rufescent toward base; legs pale, the antennae black, with the first three and the eleventh joints paler; vestiture short, coarse and rather inconspicuous, not dense; head nearly as long as wide, arcuately narrowed behind the large but not very prominent eyes, the punctures extremely fine but much coarser and close toward the base and sides; antennae long, thick, cylindric with obtrapezoidal joints, attaining the middle of the elytra, the second joint shorter than the third, both elongate, obconic and shorter than the first, the outer joints slightly wider than long; prothorax two-thirds wider than long and one-half wider than the head, the sides broadly rounded, feebly converging and scarcely visibly sinuate toward base, the angles distinct, the surface strongly convex, finely, not very closely and scarcely at all asperately punctate, with a large indentation in the middle before the scutellum, the base broadly, unevenly arcuate; eytra transverse, slightly wider and barely a third longer than the prothorax, the bead along the suture extremely fine, almost obsolete, the humeri narrowly rounded to the prothorax, the punctures slightly coarse, very close-set, deep and asperate; abdomen distinctly narrower than the elytra, parallel and nearly straight at the sides throughout, the fifth segment but little narrower, the punctures rather large, strong and moderately close-set toward base, becoming gradually very minute and sparse apically, the basal impressions wide and rather deep. Length 3.0 mm.; width 0.87 mm. Ohio (Cincinnati), — Chas. Dury...............**suturalis** n. sp.
Form similar, the size materially smaller, polished, black as in *suturalis* throughout, except that the elytra are black but obliquely pale from the humeri to the suture at the middle and thence broadly to apex, also narrowly throughout at the apical margin; punctuation throughout similar but finer, less conspicuous and rather less close-set; head relatively larger, distinctly though not very closely punctate toward the base and sides; antennae almost similar but somewhat shorter and thicker, the outer joints slightly more transverse; prothorax similar in general form but only about three-fifths wider than long and scarcely two-fifths wider than the head, the subbasal impression much feebler, shorter and broader; elytra and abdomen similar. Length 2.7 mm.; width 0.8 mm. Missouri (St. Louis).......................**tristigma** n. sp.
3 — Form rather stouter than in *tristigma*, shining, pale testaceous in color, the head slightly piceous, the elytra blackish, pale at the humeri and narrowly on the suture posteriorly, the abdomen blackish posteriorly; legs pale, the antennae dusky, paler toward base and at tip; sculpture as in *tristigma* but still finer, feebler and sparser, the punctures of the elytra scarcely at all asperate; head similar, the antennae barely ex-

tending behind basal third of the elytra and still stouter, the outer joints rather strongly transverse; prothorax similar in form but with the subbasal impression small and very feeble; elytra similar, the sutural bead very fine but distinct, the surface as usual not impressed behind the scutellum; abdomen parallel, slightly narrower than the elytra, the sides slightly arcuate. Length 2.7 mm.; width 0.85 mm. Texas, — H. F. Wickham.......................................**texana** n. sp.

The male sexual characters are very distinct and interesting, the elytra in *suturalis* being thrown up in a strong narrow ridge at each side of the suture from near basal third to the apex, the fifth tergite having two fine longitudinal carinae, approximate and posteriorly converging in somewhat more than apical half, with a shorter carina at each side much more distant from either of the median carinae than the latter are from each other. In *tristigma* the elytra are similarly but more feebly elevated along the suture in posterior half only and the four carinae of the fifth tergite are shorter, subequidistant and less unequal in length among themselves, the sixth broadly sinuate throughout the width at tip, the edge of the sinus with small porrect and widely spaced spinules, each bearing the small stiff seta peculiar to the present group of genera. *Texana* is at present represented by the female only. The *Homalota trimaculata*, of Erichson, is evidently a *Pleurotobia* allied to *tristigma*, but differing in having the sides of the prothorax piceous; the elytral spots are also smaller and more rounded, judging by the language of the description.

Subtribe **Gyrophaenae.**

This group is one of the most specialized of the Bolitocharini and is composed of a moderate number of genera and very numerous species, inhabiting stemmed fungi of many genera, but rather unequally diffused over the northern hemisphere, this distribution doubtless depending directly upon the relative abundance of the more highly organized fungi. In North America the subtribe is extremely abundant everywhere, except in the regions bordering upon the Pacific Ocean, where it is comparatively rare, and, although known at present by one or two species in the northern parts and one in Lower California, I have never yet seen a specimen collected in California or Oregon. Dr. Sharp has described numerous species from Mexico, but the European representatives appear to be much less numerous than the American, though this may be due largely to lack of systematic study of the palaearctic species, as the known genera are about twice as numerous as those of North America. In the latter region the richness of the subtribe may be realized when it is considered that a collection made in the Catskill Mountains by H. H. Smith, now forming a part of my cabinet, contains fourteen species from that limited area alone.

The body in this subtribe is small to very minute in size, of more or less stout fusiform outline and compact, rather convex build, the integuments generally pale in color with darker marking and very thin and diaphanous as a rule, frequently becoming distorted in drying, though this applies more particularly to *Gyrophaena* and *Phanerota*, the exoskeleton being normally thick in the other genera. The hypomera are feebly inflexed and visible from the sides in all the genera except *Brachida* and *Encephalus*, where they are strongly inflexed and invisible from a lateral point of view, and the scutellum is well developed and flat, varying but little throughout. The antennae are variable within generic limits in *Gyrophaena* only, as here considered, seldom notably long and always bristle with coarse erect setae, the four basal joints being slender and usually forming a distinctly demarcated pedestal or stem for the stouter apical part, though in several genera and in one group, assumed for convenience to form a part of *Gyrophaena*, where the antennae are gradually incrassate distally, this is not so evident; the third joint is always distinctly longer than the fourth, which is generally much the smallest, but in *Diestota*, the fourth joint in size and vestiture belongs with the apical rather than the basal part. The maxillary palpi are rather short, sparsely setose, with the third joint more or less compressed and the fourth extremely slender and acicular. The legs are short or moderate, the four basal joints of the hind tarsi equal or with the first somewhat longer than the others; the claws are very slender and but slightly arcuate. The middle coxae are always widely separated, the sterna between them forming a smooth subcontinuous surface, usually broken only by a more or less fine transverse suture, the mesosternal process never being free, thus contrasting greatly, in the structure of the intermesocoxal parts, with the preceding subtribe Bolitocharae. In the formation of the sternal processes, antennae and inflexion of the hypomera, the genera *Diestota* and *Encephalus* stand at opposite extremes of the series, the former being an annectant type. The genera represented in my cabinet at the present time may be readily identified by the following characters: —

Hypomera feebly inflexed, in great part visible from a lateral viewpoint.. 2

Hypomera strongly inflexed, wholly invisible from a direct side view..... 8

2 — Mesosternal process shorter, extending nearly to or somewhat beyond the middle of the acetabula, broadly truncate and abutting against the broad metasternal projection which extends for some distance anteriorly between the coxae.. 3

Mesosternal process extending throughout the length of the coxae, the metasternum not or only very slightly projecting anteriorly between them and truncate or rounded.................................... 7

3 — Antennae gradually thicker from the base of the third joint to the tip, the eleventh joint unusually developed and as long as the preceding three combined; head free, transverse, the eyes well developed, not very prominent, finely faceted and closely setulose; neck narrow, scarcely a third as wide as the head; prothorax obtrapezoidal, having an impression before the scutellum; mesonotum broadly angulate, separated from the elytra throughout the width by a distinct depression; elytra well developed; abdomen parallel, the first three tergites impressed at base, gradually less deeply; middle coxae moderately widely separated, the mesosternal process not extending quite to the middle of the acetabula, feebly carinate along the middle and squarely truncate at apex, where it meets the equally truncate tip of the long metasternal projection; legs rather short, the tarsi stouter than usual. Europe. ***Diestota**

Antennae less developed and with a smaller terminal joint as in *Gyrophaena Brachida* and *Phaenogyra*, more or less abruptly enlarged beyond the fourth joint, sometimes gradually thicker from the base of the latter to the tip; neck very wide, the head deeply set in the apex of the prothorax; mesonotum separated from the elytra by a feebler depression, generally obsolete along the scutellum; mesosternum without trace of carina, the coxae very widely separated........................... 4

4 — Eyes moderate in size, finely faceted; first abdominal segment narrowly and feebly impressed at base, the second less distinctly and the third very obsoletely; mesosternal process extending distinctly beyond the

middle of the acetabula; elytra with asperate punctures throughout; body minute in size.. 5

Eyes very large, occupying the entire sides of the head, very coarsely faceted, the tempora obsolete; mesosternal process extending scarcely to the middle of the acetabula; elytra with very feeble and sparse or irregular sculpture; body larger in size.................................. 6

5 — Metasternal projection truncate at tip, abutting against the mesosternum throughout its width; antennae gradually incrassate from the fourth joint to the tip; elytra very long; first two abdominal segments equal in length. Europe........................***Agaricochara**

Metasternal projection rounded at tip, touching the mesosternum only at the middle; antennae shorter, abruptly dilated beyond the fourth joint, the last seven joints forming a loose parallel club; elytra short; basal segment of the abdomen much shorter than the second. Atlantic North America..**Eumicrota**

6 — Mesosternal process broadly sinuate at tip, separated from the arcuato-truncate tip of the metasternal projection by a very short discontinuity on exactly the same level; antennae slender, gradually incrassate from the fourth joint to the tip; abdomen with the first segment as long as the succeeding, the first three tergites broadly, subequally and distinctly impressed at base, the fourth also feebly concave almost throughout its extent; elytra moderate in length, always longer than in *Eumicrota* but much shorter than in *Agaricochara;* integuments thin and translucent as in *Gyrophaena*. Atlantic regions of North America. **Phanerota**

7 — Body nearly as in *Phanerota* but with the eyes moderate in size and finely faceted and the abdominal segments gradually decreasing in length toward base, the first two tergites rather narrowly, more abruptly and distinctly, though not strongly, impressed at base, the third and fourth broadly and feebly impressed and the fifth also usually somewhat concave in the median part of the disk; prothorax variable in form, the elytra moderately developed and feebly sculptured as a rule, as in *Phanerota;* antennae variable, either gradually incrassate from the fourth joint to the tip or with a long loose parallel club composed of the outer seven joints; metasternum broadly arcuate, the mesosternal process arcuato-truncate, with obliterated suture. Cosmopolitan ....**Gyrophaena**

Body minute, nearly similar but with dense integuments, smaller and more elongate head and longer elytra, punctate as in *Agaricochara;* abdominal segments slightly decreasing in length toward base, the first three tergites rather narrowly and feebly though distinctly and equally impressed at base, the fourth and fifth scarcely at all impressed; antennae gradually incrassate from the fourth joint to the tip, slender; mesosternal process extending to the extreme tip of the acetabula, where it is transversely truncate, abutting against the truncate or scarcely arcuate metasternum. Europe.................***Phaenogyra**

8 — Mesosternal process extending to the extreme tips of the coxae, very broad and abutting closely against the metasternum, the suture distinct and transversely rectilinear; head as in *Gyrophaena*, the neck very broad, the eyes moderate and finely faceted; antennae slender,

gradually incrassate from the fourth joint to the tip, the last joint moderate; body very stout, convex, the prothorax transverse, the elytra short; abdominal segments decreasing only slightly in length toward base, the first three tergites feebly impressed basally; integuments dense. Europe.. * **Brachida**

Mesosternal process extremely wide, nearly as in *Brachida*, extending to the posterior limits of the acetabula, where it is separated from the metasternum by a perfectly straight transverse suture; body very short, stout, convex, the head transverse, strongly deflexile, the eyes moderate, very prominent and finely faceted, the sides of the head rapidly converging behind them; antennae short, strongly incrassate distally from the small globular fourth joint; abdomen very short, rounded at the sides and constricted at base. Europe............. * **Encephalus**

The foreign genera indicated above may be further alluded to as follows: —

Diestota Rey.— The outline characters of the table are taken from a specimen of the rare species noted in the catalogue of Heyden, Reitter and Weise under the name *mayeti* Rey, and kindly given me by Mr. Fauvel, who has also placed the name *testacea* Kr., on the same label, but I have been unable to find the latter name in the catalogue mentioned. *Diestota* is at once distinguished from any of the other genera of the subtribe by its narrow neck and disengaged head, and is in many respects a connecting bond between the Gyrophaenae and Bolitocharae, though apparently more properly a member of the former subtribe; at the same time, it may more appropriately form the type of a separate subtribe as maintained by Rey. Dr. Sharp has referred a number of Mexican and South American species to this genus, but the accuracy of this identification is open to some doubt.

Agaricochara Kr. — This genus is very far from being a subgenus of *Gyrophaena*, as stated in the catalogue referred to above, the structure of the intermesocoxal parts prohibiting any such close alliance. The species are minute, with dense punctured integuments and with more elongate elytra than in any other genus of the subtribe. In some characters it betrays a rather close affinity with *Eumicrota*, but may be readily distinguished by the characters of the table, which are taken from *A. laevicollis* Kr.

Phaenogyra Rey. — The small and more elongate head, elongate elytra, dense integuments and character of the punctuation seem to indicate the validity of this genus also, though it is much more closely allied to *Gyrophaena* than is *Agaricochara*, as shown by the conformation of the intermesocoxal parts. The internal inclosure of the middle acetabula by the mesosternum alone, without trace of anterior advancement of the metasternum, is a singular and striking character, in which it differs completely from *Agaricochara* and *Eumicrota*, but which it shares with *Brachida*. The characters of the table are drawn from *P. strictula* Er. and *polita* Grav.; *boleti* L., which is placed under *Phaenogyra* in the European catalogue, does not belong there but is an *Agaricochara*.

Brachida Rey.— This is one of the most isolated genera of the subtribe, characterized by a stout, compact body, dense integuments, regular system of punctuation and very widely separated middle coxae, with the broad mesosternal process extending throughout their length and abutting squarely against the broad truncate metasternum. It differs from any of the preceding genera in having strongly inflexed hypomera. The type is *Brachida exigua* Heer (= *notha* Er.), as stated in the European Catalogue of 1891.

Encephalus Westw. — The preceding remark, relating to the isolation of *Brachida*, applies with even more force to this genus, which is a highly specialized type, remarkably distinct from any other of the subtribe in the power of deflexing the head upon the sterna and in the rounded, basally constricted abdomen. The prothorax and elytra are extremely transverse and subequal in width in the species before me, assumed as the type and identified by Mr. Reitter as *Encephalus complicans* Westw.

The genus *Cyphea* Fauv., may belong in the present subtribe, but I have no representative example upon which to base an opinion.

Eumicrota n. gen.

The rather numerous species of this genus may be readily known by their denser, generally black or blackish integuments, regular system of punctuation, short elytra and small size, some of them being so minute as to be comparable only with *Ptilium*, of the Trichopterygidae. The secondary male sexual characters are frequently complex, consisting of small spines or protuberances on the dorsal surface of the abdomen, but, in other forms, these secondary characters are very feeble. The species are moderately numerous, those before me at present being separable by the following characters: —

Antennae pale in color..2

Antennae black or blackish beyond the fourth joint......................12

2 — Species less minute, about 1.0 mm. or more in length................3

Species very minute, much under 1.0 mm. in length.......................11

3 — Small asperate punctures of the elytra very sparse; male with strongly marked secondary sexual characters. Form rather stout, subparallel, convex, shining, blackish-piceous in color, the elytra very slightly paler, uniform; abdomen black, especially behind; integuments rather coarsely micro-reticulate throughout, the pubescence very short, sparse and inconspicuous; head transverse, finely, sparsely punctate; prothorax twice as wide as long, a third or fourth wider than the head, widest near the base, the sides arcuate, the surface minutely, very sparsely punctate throughout, with a small rounded impression before the scutellum; elytra strongly transverse, slightly wider and longer than the prothorax; abdomen not quite as wide as the elytra, parallel; legs short, slender, pale. *Male* having a short erect spiniform process at the middle of the apex of the first tergite, flanked on each side by a very minute marginal angulation, the fourth tergite with two small, suberect, spiniform processes on the disk just before the apex, separated by about a seventh of the total width of the plate, the fifth with two small and more obtuse, obliquely cariniform processes, more approximate and at a greater distance from the apex; sixth angulate at tip, the angle reflexed. Length 1.0–1.5 mm.; width 0.35–0.45. mm. New York (Catskill Mts.), District of Columbia, Missouri (St. Louis) and Texas (Dallas). [= *Gyrophaena corr.* Er.]........**corruscula** Er.

Small asperate punctures more close-set; male with feeble secondary sexual characters, chiefly affecting the emargination of the sixth tergite......4

4 — Elytra black, the humeri testaceous. Body stout, compact, polished, micro-reticulate throughout, the lines fine; color dark testaceous, the abdomen clouded with blackish except toward base; head large, sparsely punctate at each side of the median line; prothorax transverse but not quite twice as wide as long, only very slightly wider than the head, finely, sparsely, irregularly punctate at each side of the impunctate median line, not impressed before the scutellum, the base rather strongly arcuate; elytra strongly transverse, a fifth wider and fully a fourth longer than the prothorax, finely, not very closely, asperulately punctate; abdomen at base almost as wide as the elytra, narrowed and arcuate at the sides thence posteriorly; legs short, slender, pale flavate in color. *Male* with the sixth tergite broadly produced at apex, the

lobe semicircularly emarginate, the lateral projections moderately acute. Length 1.2 mm.; width 0.45 mm. Pennsylvania (near Philadelphia). **humeralis** n. sp.

Elytra uniform in coloration throughout or with the humeri almost imperceptibly paler..5

5 — Elytra very short, but slightly longer than the prothorax.............6

Elytra very distinctly longer than the prothorax..........................10

6 — Abdomen black or blackish throughout when mature...............7

Abdomen dark testaceous, clouded with black posteriorly................9

7 — Prothorax less transverse, evidently less than twice as wide as long. Form only moderately stout, polished, reticulate, piceous in color, the abdomen blackish, the legs and antennae bright flavate; head nearly as in *humeralis;* prothorax slightly wider than the head, about three-fourths wider than long, finely, sparsely punctate, without distinct median impunctate line, very obsoletely impressed before the scutellum, the base strongly arcuate; elytra slightly wider than the prothorax, the suture equal in length to the median line of the latter, the punctures fine and not very close-set, nearly as in *humeralis*, the abdomen nearly similar. *Male* with the produced lobe of the sixth tergite deeply and parabolically emarginate throughout its width, the emargination wider than deep, the lateral projections very narrowly obtuse at tip. Length 1.0 mm.; width 0.38 mm. Texas (Dallas), — H. F. Wickham. **texanella** n. sp.

Prothorax extremely transverse, more than twice as wide as long......... 8

8 — Form stout, compact, suboval, polished, blackish-piceous, the legs and antennae flavate; micro-reticulation distinct as usual; pubescence sparse, stiff and suberect; head as in *humeralis* but relatively smaller; prothorax very short, distinctly wider than the head, the sides strongly arcuate, the base broadly so, not impressed, very finely, sparsely and irregularly punctured except along a very ill-defined median line; elytra only very slightly wider than the prothorax, the suture very slightly longer than the median line of the latter, the punctures fine and rather more close-set than in the two preceding species; abdomen similar. *Male* with the emargination of the broad median lobe of the sixth tergite circular and shallow, nearly three times as wide as deep, the lateral projections broadly obtuse at tip. Length 0.95-1.2 mm.; width 0.38-0.4 mm. North Carolina (Asheville) to Texas. [= *Gyrophaena soc.* Er.]..**socia** Er.

Form nearly similar, polished, strongly micro-reticulate, the head and prothorax black with a feeble piceous tinge, the elytra slightly paler, piceous, with the humeri generally very slightly paler piceous; abdomen black throughout, the legs and antennae flavate; head as in *socia*, the prothorax nearly similar, being quite as distinctly wider than the head and more than twice as wide as long, but with the sparse punctures rather stronger and the impunctate median line more convex or bordered at each side by a feeble impression; elytra much more distinctly wider than the prothorax, the humeri rounded and somewhat exposed, the suture slightly longer than the median line of the prothorax, the punctures fine, asperulate and close-set; abdomen similar. *Male* with the lobe of the sixth tergite broader and more broadly emarginate, the emargination extending from side to side of the apex, circularly rounded, shallow and between three and four times as wide as deep, with the adjoining surface feebly swollen at the middle, the lateral projections subrectangular, owing to the posteriorly diverging sides, and but slightly obtuse. Length 1.1–1.25 mm.; width 0.45–0.55 mm. Missouri (St. Louis)..........................**melania** n. sp.

9 — Body only moderately stout, shining, strongly reticulate as usual, pale piceous, the head blackish, the elytra faintly more flavescent, uniform throughout; abdomen dark to pale testaceous, clouded with piceous-black before the apex, the legs and antennae bright flavate; head smaller than usual, distinctly but sparsely punctate at each side of the rather broad median impunctate line; prothorax twice as wide as long, very distinctly wider than the head, transversely and rectilinearly truncate throughout the width at apex, arcuate at base, the sides rounded, the surface rather strongly and unusually closely punctate, feebly and approximately biimpressed before the scutellum; elytra distinctly wider than the prothorax, the suture but little longer than the median line of the latter, the humeri slightly exposed, rounded, the punctures fine but strong and close-set; abdomen nearly as wide as the elytra, gradually and rather strongly narrowed from base to apex. *Male* with the emargination of the lobe of the sixth tergite nearly as in *melania*, but with the lateral projections broader and more obtusely rounded and the swelling of the surface, adjoining the sinus at the middle, feebler and more diffuse. Length 1.1–1.4 mm.; width 0.35–0.5 mm. New York (Catskill Mts.)......................**pallidula** n. sp.

10 — Form moderately stout, subparallel, dark castaneous, the abdomen blackish posteriorly, the legs and antennae flavate, the last joint of the latter dusky; integuments shining, with the usual micro-reticulation; head nearly as in *pallidula* but more obsoletely punctate; prothorax twice as wide as long, distinctly wider than the head, the sides rounded but shorter than usual, the base not so evenly rounded but oblique and straight toward the sides, the broad median part more evidently lobate; surface finely, sparsely punctulate, not distinctly impressed; elytra fully a fifth wider and nearly one-half longer than the prothorax, the humeri distinctly exposed, the punctures fine, asperate and close-set; abdomen obviously narrower than the elytra and but feebly narrowed from base to apex. *Male* with the lobe of the sixth tergite parallel, its apex with a shallow and broadly rounded sinus more than twice as wide as deep and not much more than half as wide as the lobe, the surface of which is perfectly flat throughout, the lateral projections broad and broadly rounded at tip. Length 1.3 mm.; width 0.55 mm. Arizona (Pinal Mts.),— H. F. Wickham.......**pinalica** n. sp.

Form stout, subparallel, polished, the usual micro-reticulation obsolete except on the elytra and abdomen, castaneous, the head blackish, the abdomen flavo-testaceous, black posteriorly; legs and antennae flavate, the last joint of the latter dusky; pubescence suberect, moderately short and stiff; head and prothorax very minutely, sparsely and indistinctly punctulate, the latter distinctly wider than the head, obviously more than twice as wide as long, with the sides parallel and strongly rounded, the base arcuate, the surface not impressed; elytra but just visibly wider than the prothorax but distinctly longer, though less elongate than in *pinalica*, finely, rather closely punctate, the humeri feebly exposed in the reëntrant angle between the prothorax and elytra; abdomen evidently narrower than the elytra, subparallel. *Male* with the lobe of the sixth tergite smaller than usual, parallel, broadly rounded at the sides of the apex, emarginate in median two-fifths, the notch parallel and straight at the sides and feebly sinuate at the bottom, deeper than wide; fifth tergite with two feeble cariniform tubercles on the disk and separated by one-half the total width of the plate. Length 1.0 mm.; width 0.4 mm. Mexico (Puebla)................**azteca** n. sp.

11 — Body moderately stout, convex, compact as usual, shining, dark piceo-castaneous throughout, the legs and antennae pale flavate; integuments micro-reticulate, the head and pronotum obsoletely so; head rather large, very minutely, sparsely punctulate; prothorax twice as wide as long, distinctly wider than the head, the sides strongly rounded, the base strongly arcuate, subtruncate at the middle, the surface minutely, sparsely punctulate throughout, not impressed; basal border strong at the middle; elytra slightly wider and distinctly longer than the prothorax, finely, asperately and closely punctate, the humeri but little exposed; abdomen distinctly and regularly narrowed from the base, where it is nearly as wide as the elytra, to the apex, the sides nearly straight. *Male* with two very small slender posteriorly inclined, setigerous and spiniform processes just behind the median transverse line of the fifth tergite, separated by about a fourth of the total width of the plate, the sixth tergite strongly angulate at the middle. Length 0.7 mm.; width 0.35 mm. Mississippi (Vicksburg)....**minutissima** n. sp.

Body somewhat stouter, shining, dark castaneous, the abdomen dark testaceous, clouded gradually with blackish posteriorly; legs and antennae bright flavate; integuments distinctly micro-reticulate throughout; head smaller, minutely, sparsely punctulate; prothorax fully twice as wide as long, very much wider than the head, finely, sparsely punctulate, with a feebly defined impunctate median line; sides strongly rounded, the base arcuate, feebly subtruncate toward the middle; elytra only just visibly wider but evidently longer than the prothorax, finely, asperulately and not very closely punctate; abdomen nearly as wide as the elytra, subparallel, arcuately narrowed near the tip. *Male* having two slender feeble arcuate carinae on the disk of the fifth tergite, separated by about a fourth of the width of the plate and slightly oblique toward each other posteriorly, the concave sides of the carinae internal; sixth tergite largely concealed in the type, but apparently obtusely lobed and rounded at the middle. Length 0.7 mm.; width 0.38 mm. North Carolina (Asheville).......................**atoma** n. sp.

12 — Form very stout, parallel, convex, compact, polished, deep black, the legs, base of the antennae, extreme tip of the abdomen and legs piceous, the minute humeral umbones slightly pale; integuments reticulate with the usual very fine incised lines enclosing somewhat coarse meshes; head moderate, transverse, with a few very fine punctures toward the sides; eyes as usual; prothorax very short, distinctly more than twice as wide as long and fully a third wider than the head, strongly rounded at the sides, broadly arcuate at base, the surface with a few widely

scattered and irregular setigerous punctures, not at all impressed before the scutellum; elytra only very slightly wider than the prothorax but nearly one-half longer, parallel and straight at the sides, the humeri scarcely exposed, the punctures fine, asperulate and sparse; abdomen more finely and much more strongly reticulate throughout, impunctate, parallel, feebly narrowed near the apex, about as wide as the elytra. *Male* having a short broad and rounded sublamellate process at the middle of the apical margin of the first tergite, the fourth tergite with a long erect and acutely pointed, very conspicuous spiniform process on the disk before the apex at each side at about one-eighth the width from the margin, the fifth plate with a broad subelevated flat apical edge, extending obliquely forward near each side, the sixth very acutely produced at the middle posteriorly, the lobe somewhat reflexed. Length 1.2–1.35 mm.; width 0.6–0.65 mm. Cuba (Cayamas), — C. F. Baker.

cornuta n. sp.

Corruscula is a rather common species but the males are very rare, there being only one among the sixteen specimens at hand; the contrary rule prevails, however, through the remainder of the genus, where the males greatly outnumber the females. *Cornuta* is a very remarkable species, having dorsal sexual marks on the tergum even more conspicuous than in *corruscula*, but these characters are very variable, one male before me having the long spines of the fourth plate reduced to small and very slender proportions; the broader thickened margin of the fifth tergite is scarcely at all developed in this example. *Azteca* is allied to *oblita* Shp., but apparently has the prothorax more nearly equal in width to the elytra and differs also in the paler basal parts of the abdomen and the closer elytral punctures. The genus *Eumicrota* will include in addition the South American *Gyrophaena pumila* and *parvula*, of Sharp.

Phanerota n. gen.

The species of this genus are few in number but include some of the largest of the subtribe and appear to be peculiar to the North and South American continents. They may be known at once from *Gyrophaena* by the very large and coarsely faceted eyes, which occupy the entire sides of the head as in *Stenus*, but otherwise, and especially in coloration, in the diaphanous integuments and general facies, they greatly resemble that genus, with which they have been heretofore confounded, except by Dr. Sharp, who suggests the propriety of their generic isolation. They are very decisively distinguished from *Gyrophaena* by the structure of the broad intermesocoxal parts, the metasternal projection advancing in *Phanerota* nearly to the middle of the acetabula, the mesosternal process being correspondingly abbreviated. The species vary to a remarkable degree in point of size, those in my cabinet being definable as follows:—

Species inhabiting the Atlantic districts, including the Island of Cuba.... 2

Species inhabiting the Peninsula of Lower California.................... 7

2 — Eyes always separated on the front by distinctly more than twice their own width. Body stout, subparallel, moderately convex, highly polished, the integuments wholly devoid of trace of micro-reticulation, except the abdomen, which is finely and rather feebly reticulate; color pale flavate with distinct reddish tinge, the head, elytra in apical third or fourth, except at the suture, and fourth tergite, except at the lateral margins, black or piceous-black; head transverse with a number of rather coarse punctures toward the eyes; antennae slender, moderately incrassate distally, extending to about basal third of the elytra; prothorax not quite twice as wide as long, only very slightly wider than the head, parallel and rounded at the sides, arcuate at base, very remotely and obsoletely punctulate, the two punctures behind the middle, separated by about a fourth of the width, especially distinct; elytra well developed, about a fifth wider and one-half longer than the prothorax, finely, sparsely punctate, the humeri rather widely exposed; abdomen at base nearly as wide as the elytra, thence gradually narrower to the apex, very minutely, obsoletely punctulate toward the apices of the segments, sparsely, coarsely pubescent. *Male* with the outer apical angles of the elytra slightly swollen; sixth tergite with two short, widely separated porrect processes, rounded at tip and impressed on their outer sides posteriorly; between them the apex is produced in a short rounded lobe, very much shorter than the processes, the lobe being the apical outline of a broad smooth swelling of the surface; *female* with the elytral angles unmodified, the sixth tergite subconical with the apex truncate, the truncature sinuate throughout its width, the sinus about five times as wide as deep. Length 1.4–2.5 mm.; width 0.62–0.9 mm. Rhode Island and Pennsylvania. [=*Aleochara fasc.* Say (not preoccupied in *Phanerota*) and *vinula* Er.]................**fasciata** Say

Eyes more convex, separated on the front by not more than twice their own width 3

3 — Abdomen in great part pale, the blackish coloration involving the fourth tergite more or less, the apex always pale.......................... 4

Abdomen in great part black, pale near the base and generally at the immediate apex.. 5

Abdomen clearly bicolored, the anterior half pale, the posterior black, the line of demarcation abruptly defined and not nubilous or indefinite as it is in the two preceding groups, the apex not pale................. 6

4 — Form rather stout, shining, the head and pronotum very obsoletely micro-reticulate, the elytra rather strongly so, the abdomen distinctly; color pale flavate, the head piceous-black, the elytra broadly infumate toward the external apical angles; legs and antennae pale flavate as usual; head with scattered coarse punctures except broadly along the median line; prothorax very nearly twice as wide as long, distinctly wider than the head, which is relatively smaller than in *fasciata*, similar in outline and punctuation; elytra about a sixth wider and nearly one-half longer than the prothorax, with the humeri less exposed than in *fasciata*, the punctures similarly fine but not quite so sparse, especially toward the outer apical angles; abdomen nearly similar; antennae rather more incrassate distally. *Male* wanting; *female* with the sixth tergite nearly as in *fasciata*, the sinus at the apex rather more abruptly formed and more broadly transverse at the bottom but equally shallow. Length (much extended) 2.4–2.6 mm.; width 0.7–0.87 mm. New York (Catskill Mts.)..**ocularis** n. sp.

Form as in *ocularis*, polished, pale flavate, the head and elytral apex — disappearing at the suture—black; head and pronotum without trace of micro-reticulation, the elytra and abdomen rather distinctly reticulate; head coarsely, sparsely punctate except along a broad median line, the antennae moderately incrassate distally; prothorax slightly, though distinctly, wider than the head, nearly twice as wide as long, rounded at the sides, broadly arcuate at base, with a few sparse punctures as in the preceding species; elytra slightly wider and one-half longer than the prothorax, the humeri only slightly exposed, the punctures unusually distinct and asperate but sparse; abdomen as in *ocularis*, the tergites punctulate only at the apices. *Male* with the two short apical processes of the sixth tergite nearly as in *fasciata*, the surface at the middle swollen, smooth and produced posteriorly in an acute lobe which nearly attains the line of apices of the processes; external apical angles of the elytra narrowly, distinctly and prominently swollen, the surface near them broadly concave. Length 2.2–2.4 mm.; width 0.8–0.85 mm. Texas (Dallas),—H. F. Wickham.....................................**angularis** n. sp.

Form less stout, smaller in size, polished, pale rufo-flavate, the head dark rufo-piceous, the elytra generally pale throughout, sometimes feebly infumate along the immediate apex externally; integuments of the anterior parts without trace of micro-reticulation, the elytra and abdomen very obsoletely reticulate; head nearly as in *angularis*; prothorax distinctly wider than the head, fully three-fourths wider than long, widest anteriorly with the sides rounded, more convergent thence to the base, the latter broadly arcuate, the surface with a few scattered punctures as in *fasciata*; elytra unusually short and transverse, slightly wider and about a third longer than the prothorax, finely, asperulately and very sparsely punctate; abdomen at base rather distinctly narrower than the elytra gradually tapering thence to the apex, the tergites finely punctulate except broadly toward base. *Male* with the short processes at the apex of the sixth tergite acutely angulate at tip, the median lobe advanced nearly to the line of their apices as in *angularis* but more broadly angulate, the surface more broadly and feebly swollen; external apical angles of the elytra only very feebly and broadly swollen; *female* nearly as in *fasciata.* Length 1.4–2.3 mm.; width 0.7–0.76 mm. Florida (Palm Beach)........................**floridana** n. sp.

5 — Body stout in form, polished, pale piceo-testaceous in color, the head and elytra, the latter broadly and gradually toward the external apical angles, black; legs and antennae flavate; head and pronotum finely, obsoletely micro-reticulate, the elytra and abdomen more coarsely and strongly so; head coarsely, sparsely punctate toward the sides, the prothorax rather distinctly wider than the head, nearly twice as wide as long, almost as in *fasciata* throughout; elytra slightly wider and one-half longer than the prothorax, the humeri only very narrowly exposed, rounded, the punctures verv fine, asperulate and sparse; abdomen at base nearly as wide as the elytra, much narrower at apex, subimpunctate except sparsely along the apices of the tergites. *Male* with the two apical processes angulate at tip, the median lobe broadly angulate and advancing about half way to the line of their apices, the surface strongly swollen and smooth; external apical angles of the elytra only very narrowly and feebly, longitudinally swollen; *female* nearly as in *fasciata*, except that the emargination is rather broader and almost evenly circular in curvature between the angulate apices, the latter less dentiform. Length 1.3–2.3 mm.; width 0.65–0.85 mm. Missouri (St. Louis) and Indiana. [=*Gyrophaena diss.* Er.].
dissimilis Er.

6 — Form only moderately stout, subparallel, polished, smaller in size, pale rufo-flavate in color, the head and elytra black, the latter testaceous in anterior half at the sides, the pale color obsolete at the scutellum; head and pronotum finely and very obsoletely micro-reticulate, the elytra and abdomen somewhat strongly so; head with a few coarse sparse punctures except broadly along the median line; antennae moderate; prothorax distinctly wider than the head, almost twice as wide as long, nearly as in *fasciata* throughout; elytra slightly wider than the prothorax and but little more than a third longer, the humeri only slightly exposed, rounded, the punctures rather strong, asperate and sparse; abdomen at base subequal in width to the elytra, moderately tapering thence to the tip, sparsely punctulate along the apices of the dorsal plates as usual. *Male* with two short slender acute processes at the apex of the sixth tergite as usual, but with the bottom of the inclosed sinus only very feebly produced in the middle as a broadly rounded lobe; external apical angles of the elytra but very slightly and briefly swollen; *female* with the sixth tergite nearly as in *fasciata.* Length 1.3–1.8 mm.; width 0.65–0.78 mm. Cuba (Cayamas),—C. F. Baker.
cubensis n. sp.

7 — Body rather stout, suboval, polished, very pale luteo-flavate, the head piceous to black, the abdomen sometimes with a small infumate cloud at about the fourth tergite; legs and antennae very pale; head and pronotum not at all micro-reticulate, the elytra faintly and obsoletely, the abdomen very distinctly so; head with some scattered coarse punctures as usual, the eyes separated by scarcely twice their own width; antennae moderate; prothorax distinctly wider than the head, about twice as wide as long, widest rather distinctly before the middle, the sides more rounded anteriorly, the base arcuate, the surface nearly

as in *fasciata* and other species; elytra well developed, nearly a fourth wider and one-half longer than the prothorax, the humeri well exposed, the punctures fine and very sparse; abdomen at base nearly as wide as the elytra, rapidly tapering thence to the tip, subimpunctate as usual. *Male* with the elytra narrowly and feebly elevated for a short distance in front of the exterior apical angles, the sixth tergite concealed in specimens at hand; *female* with the sixth tergite emarginate nearly as in *fasciata*, the apices bounding the sinus obtusely rounded. Length 1.4-1.9 mm.; width 0.75-0.88 mm. Lower California (San Jose del Cabo and Sierra El Taste), — Chas. Fuchs.......... **peninsularis** n. sp.

That form of *dissimilis* which is alluded to by Erichson as having densely and finely granulated elytra, is probably a wholly different species, and the large puncture at each side of the front, near the eyes, is not visible in any of my specimens and may be a deformity in the types described; otherwise the species which I have assumed to be *dissimilis* agrees well with the orginal description. In South America, *Phanerota* is represented at present by *Gyrophaena boops* and *debilis*, of Sharp.

Gyrophaena Mann.

This genus is composed of very numerous species, having considerable variety in facies and in the form and structure of the antennae and prothorax, but agreeing throughout in the conformation of the intermesocoxal parts, the mesosternal process being very broad and extending virtually throughout the length of the acetabula, where it meets the rounded and very short metasternal projection. The secondary sexual characters of the male are also very distinct as a rule and considerably diversified, and, as the males are usually as abundant as the females, we fortunately have here a very ready means for the estimation of specific values. The sixth tergite in the female is usually rounded and without special modification, but in a few species, such as *sculptipennis*, there is a broad shallow sinus at the apex of this plate, analogous to the sinus of the sixth tergite of the female so constant throughout the genus *Phanerota*. The punctuation of the elytra is generally, and perhaps to some degree universally, dual in nature, there being some scattered asperulate punctures, especially visible toward the external apical angles, which bear the short, stiff, suberect hairs and others, irregular in size and disposition, which seem to be simply minute nude indentations of the surface of obscure origin; this sculpture is especially developed in such forms as *sculptipennis* and *subpunctata.* The tergites have each an apical or subapical series of small asperate setiferous punctures, the disk generally having in addition some very minute, sparsely scattered punctures except toward base, these latter bearing very short, decumbent and peculiarly arcuate hairs, only visible under high power. On the pronotum the two setigerous punctures, moderately close-set at basal third or fourth and another, at each side more posterior and near the margin, appear to be constant throughout the genus, and the other very sparse and smaller punctures are generally more closely aggregated in two irregular parallel longitudinal series, and, to some extent, remotely and irregularly scattered toward the sides. The thirty-two species in my cabinet may be conveniently classified as follows:—

Antennae gradually incrassate from the fourth or fifth joint to the apex.. 2

Antennae with the joints beyond the fourth abruptly wider, forming a a long loose parallel or subparallel club............................ 5

2 — Prothorax but slightly narrower than the base of the elytra. Form stout, rather depressed, polished, pale flavate, the head dark rufopiceous, the elytra more whitish in color, with the outer apical part narrowly and faintly nubilous with piceous, a faintly piceous cloud also occupying most of the fourth tergite; prothorax slightly darkened along the middle, sometimes inclosing an elongate pale spot in basal half; head, pronotum and elytra wholly devoid of trace of microreticulation, the abdomen very obsoletely reticulate; head transverse, with a few coarse punctures at each side, the antennae attaining basal third of the elytra, the fourth joint elongate, as long as the fifth, the tenth as long as wide; prothorax much wider than the head, three-fourths wider than long, rounded at the sides anteriorly, thence feebly narrowed to the broadly rounded basal angles, the base broadly rounded, distinctly reflexed throughout the width, the surface with two transverse pairs of submedial punctures, strongly impressed before and behind the middle of the length; elytra about a fifth wider and nearly one-half longer than the prothorax, the humeri well exposed, the setigerous punctures sparse and asperate at the sides and toward the external angles, elsewhere with very fine, sparse, nude and irregularly distributed punctules; abdomen at base slightly narrower than the elytra, at apex distinctly narrower. *Male* with two short acute processes at the apex of the sixth tergite, separated by more than two-fifths

of the basal width, the bottom of the inclosed sinus feebly and broadly lobed, the apex of the lobe with two small acute and approximate cusps, the adjoining surface feebly and obliquely bitumorose; *female* with the sixth tergite broadly arcuato-truncate at tip. Length 1.9–3.0 mm.; width 0.68–0.88 mm. New York (Catskill Mts.) and Pennsylvania Westmoreland Co.)...................................**vitrina** n. sp.

Prothorax much narrower than the base of the elytra, generally distinctly obtrapezoidal in form.. 3

3 — Fourth antennal joint elongate; antennae pale. Body stout in form, rather convex, shining, dark in color, the head black, the prothorax and entire abdomen, except feebly toward base, blackish-piceous, the latter flavescent at tip, varying to entirely pale with a narrow fascia; elytra flavo-testaceous, blackish at the external apical angles; legs and antennae flavate; head strongly, the pronotum and abdomen more feebly though obviously micro-reticulate, the elytra very obsoletely so; head as in *vitrina,* but with more numerous and smaller sparse punctures toward the sides; prothorax slightly, though evidently, wider than the head, one-half wider than long, rounded at the sides anteriorly, thence strongly narrowed toward base, the latter broadly, evenly arcuate and finely reflexed, the surface with two medial longitudinal series of punctures, also feebly biimpressed before the scutellum, the impressions with some fine nude punctules; elytra a third wider and longer than the prothorax, the humeri rather widely exposed, rounded, the punctures very fine and sparse, nearly as in *vitrina;* abdomen wide, narrowed slightly toward tip. *Male* with the sixth tergite broadly arcuato-truncate at tip, the apex having a very shallow, circularly rounded, abruptly formed sinus about a fourth as wide as the segment, the sinus with two very small tuberculous asperities almost equally trisecting its width, or more approximate, the ends of the sinus each marked by a small oblique compressed tubercle, generally not projecting posteriorly behind the edge, the surface before the sinus with two more distinct and rather widely separated and numerons smaller setigerous tubercles; *female* with the sixth tergite arcuato-truncate throughout the width. Length 2.0–2.6 mm.; width 0.66–0.8 mm. New York (Catskill Mts. to Lake Superior).......................................**flavicornis** n. sp.

Fourth antennal joint not all elongate, rounded or feebly obtrapezoidal; antennae dark; smaller species....................................... 4

4 — Form moderately stout and shining, dark in color, the entire surface strongly micro-reticulate, the abdomen rather more finely; head and antennae black, the three basal joints of the latter flavate; prothorax blackish, the elytra flavo-testaceous, black at the outer apical angles, the abdomen rufo-testaceous, with the fourth and most of the adjoining tergites black; legs flavate; head finely, sparsely punctate laterally, the antennae rather stout distally, but little longer than the head and prothorax, the latter strongly transverse, about three-fourths wider than long, slightly but distinctly wider than the head, feebly obtrapezoidal, rounded at the sides anteriorly, the apical and post-median pairs of punctures most distinct; elytra a third wider and one-half longer than the prothorax, the humeri well exposed, rounded, the punctures fine, distinct externally toward tip, obsolete toward the scutellum; abdomen somewhat arcu-

ately narrowed from base to apex, nearly as wide as the elytra. *Male* with four or six subequal, subequidistant, and elongate asperities near the apex of the fifth tergite in almost median half, the sixth with two long, slender and aciculate porrect processes at tip, separated by half the width, the processes gradually and feebly curved inwardly and to some extent upwardly toward apex, the inclosed sinus feebly curved, with an extremely feeble obtuse cusp at the middle; fine and dense asperities of the seventh tergite parted along the median line by a feebly impressed glabrous channel; *female* not at hand. Length 1.4 mm.; width 0.65 mm. Utah (Provo),— H. F. Wickham........**uteana** n. sp.

Form nearly similar but more parallel, with wider head and relatively narrower hind body; coloration dark, the head blackish, the prothorax but slightly less dark, the antennae blackish-piceous, flavate toward base; elytra dark flavo-testaceous, infumate toward the apical angles externally, the abdomen black, with the tip not very obviously paler, gradually paler and dark though clear rufo-testaceous in about basal half, the legs pale; upper surface distinctly micro-reticulate throughout, the elytra most coarsely and feebly so; head feebly and sparsely punctulate laterally, the antennae rather strongly incrassate distally, with the outer joints distinctly transverse; prothorax scarcely visibly wider than the head, less transverse than in *uteana*, about one-half wider than long, the sides parallel and not obviously converging posteriorly, feebly rounded, more strongly at apex, the base arcuate, the angles rather distinct but rounded, the four post-median punctures alone distinct; elytra two-fifths wider and one-half longer than the prothorax, less transverse than in *uteana*, finely punctate externally and apically, subimpunctate elsewhere, the fine punctules very sparse but aggregated into a narrow irregular series parallel and very close to each sutural bead; abdomen subparallel, slightly narrower than the elytra. *Male* unknown; *female* with the sixth tergite rounded behind. Length 1.5 mm.; width 0.68 mm. Wisconsin (Bayfield),— H. F. Wickham..........**gaudens** n. sp.

Form stouter and less parallel, nearly as in *uteana*, convex; color dark, nearly as in *uteana* throughout, the entire upper surface almost similarly reticulate; head deep black, with a very few sparsely scattered coarse punctures at each side of the front; antennae short, strongly incrassate near the tip, the outer joints distinctly transverse, the tenth much longer as well as wider than the ninth and less transverse, the eleventh fully as long as the preceding two combined; prothorax two-fifths wider than long, distinctly wider than the head, the sides broadly rounded anteriorly, thence just visibly converging and straighter to the base, the base arcuate and narrowly reflexed as usual, the four post-median punctures strong; elytra two-fifths wider and one-half longer than the prothorax, punctured nearly as in *gaudens*, the humeri widely exposed at base; abdomen at base distinctly narrower than the elytra, thence arcuately tapering to the tip. *Male* with two small oblique elliptical and smoothly rounded, though slightly elevated tubercles, near the apex of the fifth tergite and narrowly separated, with two more elongate and feeble asperities external thereto, the sixth with two acutely pointed, rather long porrect processes at tip, gradually curved slightly inward, finely carinate externally and separated by half the total width, the inclosed sinus feebly lobed toward the middle, the lobe bearing two fine, aciculate and very approximate processes extending posteriorly half way to the line of the apices of the principal processes, the adjoining surface with two oblique smooth elliptical tumors, similar to those of the fifth tergite, and, between each of these and the base of the large processes, a small setigerous asperity; *female* with the sixth tergite broadly rounded. Length 1.3–1.6 mm.; width 0.63–0.78 mm. Colorado (Boulder Co.)..**monticola** n. sp.

Form more slender and parallel, distinctly depressed, the elytra flat; entire surface micro-reticulate, the abdomen very feebly so toward base, the elytra strongly; head darker, the prothorax rather pale, rufo-piceous, the antennae dark flavate toward base, more slender than in *monticola* and with the ninth and tenth joints similar and slightly transverse like the preceding joints; elytra very pale flavate, the outer apical angles rather abruptly piceous-black; abdomen pale and slightly more rufo-flavate, the fourth tergite black and the two adjoining piceous; legs pale flavate; head moderate, with some coarse scattered punctures at each side of the front; prothorax but very slightly wider than the head, nearly three-fourths wider than long, the sides subparallel and strongly arcuate, the base arcuate and finely reflexed as usual, punctured as in the preceding species; elytra two-fifths wider and longer than the prothorax, transverse, the humeri somewhat well exposed, rounded, the punctures very fine and sparse, disposed as usual; abdomen but slightly narrower than the elytra, parallel and straight at the sides, narrowed only slightly at apex. *Male* with four small, subequal and equidistant asperities near the tip of the fifth tergite in median third, the sixth with two long, very slender, acutely pointed and feebly arcuate porrect processes, widely separated and slightly curved inward, much more slender than in *monticola*, the bottom of the inclosed sinus just concealed in the only males at hand, but evidently without porrect processes of any decided prominence. Length 1.5 mm.; width 0.63 mm. British Columbia (Kamloops and Glenora), — H. F. Wickham.........**pacifica** n. sp.

5 — Antennal joints five to ten as long as wide or nearly so, sometimes slightly elongate..6

Antennal joints five to ten always distinctly transverse, forming a usually stouter and more compact club; species always very small in size....13

6 — Prothorax strongly transverse, almost as wide as the base of the elytra. Body stout, fusiform, moderately convex, polished, the head and pronotum very obsoletely micro-reticulate, the latter almost completely smooth; head blackish-piceous, the antennae and legs pale; prothorax pale luteous, broadly infumate toward the middle; elytra whitish-flavate, not distinctly darker at the outer apical angles; abdomen pale flavate, the median part of the fourth tergite black, the neighboring surface infumate; head with very few coarse punctures toward the eyes, the antennae rather stout, with joints five to ten slightly wider than long, and just visibly increasing in width but virtually forming the paralle club of the remaining species, the fourth joint shorter than wide; eyes small; prothorax much wider than the head, fully three-fourths wider than long, the sides subparallel, broadly rounded, the base rather strongly arcuate, the post-median pair of punctures strong;

elytra scarcely a fourth wider and two-fifths longer than the prothorax, the humeri broadly rounding to the prothorax, feebly and sparsely punctate except toward the scutellum; abdomen arcuately and feebly tapering from base to apex. *Male* with a small, narrow, somewhat elongate tubercle on the median line of the fifth tergite near the hind margin; sixth produced in the middle in a short and broadly, evenly rounded lobe, a third as wide as the segment, the lobe very feebly and broadly biimpressed; *female* wanting. Length 2.2 mm.; width 0.83 mm. New York (Catskill Mts.)...............**lobata** n. sp.

Prothorax generally obtrapezoidal, much narrower than the base of the elytra... 7

7 — Elytra very minutely, sparsely and inconspicuously punctured as usual, smooth toward the inner basal angles....................... 8

Elytra distinctly punctured...12

8 — Fifth antennal joint distinctly wider than long. Body rather stout, polished, feebly micro-reticulate throughout, the head piceous-black, the antennae dusky, flavate toward base; prothorax rufo-flavate, the elytra pale but less rufous, not darker at the apical angles, the abdomen flavate, with a feeble cloud on the fourth tergite, the legs pale; head impressed and strongly, sparsely punctate at each side of the front, the eyes small, very prominent; antennae rather short, extending to about basal third of the elytra, with joints five to ten stout, slightly transverse, just visibly increasing in width, forming virtually a subparallel club; prothorax two-thirds wider than long, slightly wider than the head, the sides parallel and somewhat strongly, evenly arcuate, slightly biimpressed before the middle of the base, the sparse punctures as usual; elytra fully two-fifths wider and about one-half longer than the prothorax, the humeri widely exposed at base, rounded; abdomen nearly as wide as the elytra, gradually and feebly tapering from base to apex. *Male* with eight elongate, subequidistant asperities on the fifth tergite near the apex, the two median rather less elongate and more acutely pointed posteriorly; sixth with two long compressed and inwardly arcuate processes at tip in median two-fifths, the processes obtusely rounded at tip, oblique in plane and rather carinate externally, the inclosed sinus subequally trisected by two straight cylindric porrect processes which are slightly bulbous at tip and about attaining the line of the apices of the lateral processes, the surface longitudinally tumid in prolongation of each of the medial processes; *female* unknown. Length 2.3 mm.; width 0.85 mm. New York (Catskill Mts.).......................**involuta** n. sp.

Fifth antennal joint at least as long as wide and generally longer....... 9

9 — General form more elongate and subparallel.......................10

General form stouter and more fusiform, the abdomen more rapidly and strongly narrowed from base to apex.............................11

10 — Form moderately stout, polished, feebly micro-reticulate throughout, pale flavate throughout, the head irregularly clouded with rufopiceous, the abdomen with a very faint cloud involving the fourth tergite and the elytra more silvery; head not very transverse, sparsely punctate laterally, the antennae more developed than in any other species, pale flavate throughout, extending about to the middle of the

elytra, the outer seven joints forming a long loose stout and parallel club, joints five to eight distinctly longer than wide, the next two fully as long as wide, the eleventh much shorter than the two preceding combined; prothorax only slightly wider than the head, one-half wider than long, feebly obtrapezoidal, the sides more rounded anteriorly, the base broadly arcuate, the sparse punctures all feeble; elytra well developed, two-fifths wider and fully one-half longer than the prothorax, the humeri well exposed and rounded; abdomen at base distinctly narrower than the elytra, thence moderately tapering to the tip. *Male* having a small, feebly elevated semicircle in about median tenth or less and near the apex of the fifth tergite, the opening of the arc anterior; sixth with two short and strongly inflexed processes in median third of the apex, the inclosed sinus transverse at the bottom, with the edges feebly undulated and bearing about five very small setae, the surface scarcely modified, smooth and polished; *female* with the sixth tergite truncate, otherwise unmodified. Length 2.2 mm.; width 0.78 mm. New York (Catskill Mts.). **antennalis** n. sp.

Form moderately stout, polished, feebly micro-reticulate throughout, the head black, the remainder rufo-flavate, the elytra flavate, blackish at apex except toward the suture, the abdomen with a blackish cloud involving the fourth and half of the fifth tergite; legs and antennae pale, the latter gradually somewhat infumate distally, extending nearly to the middle of the elytra, moderately stout, the fifth and sixth joints elongate, the next two as long as wide, the ninth and tenth very slightly wider than long, the eleventh distinctly shorter than the two preceding together; head with rather numerous sparse punctures toward the sides; prothorax very distinctly wider than the head, and, like the latter, relatively larger than in *antennalis* but otherwise nearly similar, except that the sides are virtually parallel; elytra nearly similar, except in the blackish apex; abdomen but little narrowed behind, distinctly narrower than the elytra. *Male* with sexual characters nearly like those of *antennalis*, the arcuate tumidity at the middle of the fifth tergite near but at some distance from the apex, much larger and occupying about an eighth of the total width, the short strong and inwardly projecting apical processes of the sixth, separated by a third of the width, nearly similar, the transverse bottom of the inclosed sinus with three undulations, each bearing a short seta; *female* with the sixth tergite broadly, evenly arcuate at tip. Length 2.3 mm.; width 0.78 mm. Lake Superior (Isle Royale)..**insolens** n. sp.

Form slender, polished, the head and abdomen distinctly, the elytra very obsoletely, micro-reticulate, the pronotum without trace of reticulation; head black, the prothorax piceous-black, the elytra pale silvery-flavate, without distinct darker marking, the abdomen more rufous, with the usual blackish cloud at the fourth tergite; head rather small, with very few fine punctures at each side, the antennae clear flavate throughout, rather slender, extending to about the middle of the elytra, the fifth joint elongate, six to ten as long as wide; prothorax nearly three-fifths wider than long, distinctly wider than the head, strongly obtrapezoidal, the sides rounded anteriorly, thence strongly converging to the broadly arcuate base, the usual punctures distinct; elytra shorter than in the two preceding species, strongly transverse, a fourth wider and one-third longer than the prothorax, the humeri moderately exposed at base, narrowly rounded; abdomen narrow, feebly tapering, very evidently narrower than the elytra. *Male* with a small, posteriorly rounded, low tubercle near the hind margin of the fifth tergite, the tubercle abruptly elevated posteriorly, its surface gradually sloping, expanding and gradually disappearing anteriorly, the sixth with two short stout and inwardly curved processes in median two-fifths of the apex, the bottom of the inclosed sinus with about three undulations, each bearing a very minute setose process, the adjacent surface becoming smooth and punctureless near the sinus; *female* with the sixth tergite evenly and broadly arcuate at tip. Length 1.7–2.0 mm.; width 0.66–0.76 mm. New York (Catskill Mts.)......**fuscicollis** n. sp.

Form slender, polished, the entire upper surface very feebly micro-reticulate, the elytra scarcely visibly so, pale flavate in color, the head blackish but paler toward the middle of the front, the elytra more silvery, without dark maculation, the cloud of the abdomen very diffuse, pale and barely visible; pronotum somewhat mottled with clouded areas; antennae flavate, extending to the middle of the elytra, rather stout, fifth to seventh joints slightly elongate, eighth to tenth as long as wide to slightly transverse, the eleventh much shorter than the two preceding combined; prothorax only very slightly wider than the head, three-fifths wider than long, distinctly obtrapezoidal, nearly as in *fuscicollis;* elytra much longer, only slightly transverse, two-fifths wider and three-fifths longer than the prothorax, the humeri widely exposed at base; abdomen much narrower than the elytra, feebly tapering throughout. *Male* with the fifth tergite wholly unmodified, the sixth without trace of apical processes but with the apex broadly emarginate in median third, the sinus broadly, transversely subrectilinear and unmodified at the bottom and about five times as wide as deep, its sides marked by distinct obtuse angles, the surface of each being feebly swollen; *female* wanting. Length 1.9 mm.; width 0.66 mm. New York (Catskill Mts.).
modesta n. sp.

11 — Form stouter than in *modesta,* with smaller head and more transverse elytra and with shorter elytra, smaller head and slightly less developed antennae than in *antennalis,* the integuments denser than in either, shining, micro-reticulate throughout, flavate, the prothorax bright and immaculate, paler than the elytra, which are more luteo-flavate, the head piceous, the cloud of the abdomen small and very feeble; head small, with a few sparse and distinct punctures at each side, the antennae flavate, rather stout, extending to basal third of the elytra, of the same type as in the four preceding species; prothorax fully two-thirds wider than long, much wider than the head, the sides subparallel and broadly arcuate, the usual punctures distinct but small; elytra strongly transverse, two-fifths wider and longer than the prothorax, the humeri rather widely exposed, rounded; abdomen slightly narrower than the elytra, gradually and somewhat strongly tapering from base to apex, with feebly arcuate sides. *Male* unknown; *female* with the sixth tergite broadly, evenly rounded at apex. Length 1.75 mm.; width 0.7 mm. New York (Catskill Mts.)......................**gilvicollis** n. sp.

Form stout, fusiform, allied closely to *insolens* and almost similar in coloration and in the general nature of the male sexual characters, but smaller, with more rapidly tapering abdomen and much more strongly converging sides of the prothorax basally, polished, micro-reticulate throughout, the head black; prothorax pale, clouded along the middle, the elytra pale, blackish on the flanks except at the humeri, broadly along the apex and narrowly along the suture to the base; abdomen pale rufous, clouded at and near the fourth tergite; head with a few sparse punctures as usual; antennae stout, flavate, gradually infumate distally, the fifth joint elongate, the others to the tenth gradually shorter, the latter perceptibly wider than long; prothorax much wider than the head, one-half wider than long, strongly obtrapezoidal, punctured as usual; elytra two-fifths wider and one-half longer than the prothorax, the humeri well exposed, the suture somewhat impressed, the punctures rather more distinct than usual; abdomen at base narrower than the elytra, at apex very much narrower. *Male* with a feebly tumid arc tangent posteriorly to the apex of the fifth tergite and occupying about an eighth or ninth of its entire width; sixth with two short and strong, inwardly directed processes in median third of the apex, the inclosed sinus with about three feeble undulations, each bearing a minute setose process; *female* with the asperate punctulation of the abdomen distinct and close-set posteriorly toward the sides, the sixth tergite rounded. Length 1.6–1.8 mm.; width 0.72–0.8 mm. Colorado (Boulder Co.)..**laurana** n. sp.

Form rather stout, polished, feebly micro-reticulate throughout, flavate, the head black, the elytra blackish on the flanks posteriorly and broadly along the apex nearly to the suture, the black cloud on the fourth tergite small; head well developed, with a few rather coarse punctures; antennae flavate, extending nearly to the middle of the elytra, rather stout, loose as usual in this group, the fifth joint slightly elongate, the tenth about as long as wide, the eleventh very nearly as long as the two preceding combined; prothorax rather large, slightly wider than the head, one-half wider than long, the sides rounded in nearly apical half, thence distinctly converging and straighter to the base, the latter arcuate, the punctures as usual; elytra a third wider and two-fifths longer than the prothorax, the humeri rounded and moderately exposed, the punctures minute; abdomen at base nearly as wide as the elytra, rapidly narrowed thence to the tip, the sides almost straight except near the apex, the surface smooth, almost wholly devoid of minute asperate punctures posteriorly in the female. *Male* unknown. Length 1.5–1.8 mm.; width 0.7 mm. Missouri (St. Louis.). **coniciventris** n. sp.

Form nearly similar but smaller and with a relatively smaller prothorax, polished, feebly micro-reticulate throughout, flavate, the head black, the elytra less reddish, barely at all infumate near the external apical angles, the abdominal cloud small and feeble; head as usual; antennae fully attaining basal third of the elytra, rather less stout than in *coniciventris* and sensibly infumate distally, the fifth joint as long as wide, the tenth rather wider than long, the eleventh almost as long as the two preceding combined, prothorax much wider than the head, in outline and punctuation nearly as in *coniciventris;* elytra nearly similar but less transverse, the humeri more widely exposed; abdomen nearly similar but with the surface finely, closely and asperately punctulate posteriorly, the sixth tergite similarly rounded at tip in the female. *Male* unknown. Length 1.4 mm.; width 0.67 mm. Missouri (St. Louis.). **genitiva** n. sp.

12 — Body rather stout, somewhat convex, polished, very obsoletely micro-reticulate throughout, more distinctly on the abdomen, pale flavate, the abdomen reddish, with a very small nubilous darker cloud in the usual position; elytra blackish at the external apical angles; head rufo-piceous, impressed and coarsely punctured at each side, the antennae stout, extending to basal third of the elytra, infuscate, flavate toward base, the joints five to ten somewhat wider than long, the eleventh almost as long as the two preceding combined; prothorax much wider than the head, two-fifths wider than long, the sides parallel and broadly, almost evenly arcuate, the base arcuate, the surface unusually convex, punctured in the usual manner, with a transverse punctulate impression before the scutellum; elytra transverse, a third wider and two-fifths longer than the prothorax, feebly convex, slightly impressed along the suture, strongly, closely and irregularly punctate throughout, more roughly scabrous externally toward apex, the humeri well exposed, rounded; abdomen strongly tapering from base to apex. *Male* with six small subequidistant asperities near the apex of the fifth tergite throughout the width, the two median rounded and acutely tuberculiform, the others elongate and cariniform; sixth trapezoidal, the apex fully half as wide as the base and with two incurved apical processes, obliquely compressed, the intervening sinus with three equidistant, straight, cylindric and porrect processes projecting more than half way to the line of the apices of the lateral processes, the general surface coarsely and strongly asperate throughout; *female* with the tubercles of the fifth tergite almost as in the male, the two medial more widely separated; sixth as in the male, except that the apex is emarginate throughout the width in a simple smooth sinus about five times as wide as deep, defined at the sides by simple prominent angles. Length 2.25 mm.; width 0.82 mm. Wisconsin (Bayfield) and New York (Catskill Mts.). **sculptipennis** n. sp.

Body smaller and more slender, more depressed and subparallel, polished, evidently micro-reticulate throughout, pale flavate, the elytra less rufous, not at all maculate, the abdominal cloud black, involving most of the fourth and fifth tergites; head piceous-black, paler apically, the antennae fully attaining the middle of the elytra, feebly infumate except toward base, the fifth joint longer than wide, the tenth somewhat wider than long, the eleventh much shorter than the two preceding combined; prothorax short and strongly transverse, distinctly wider than the head and fully four-fifths wider than long, the sides parallel and rather strongly arcuate; base broadly arcuate, the punctures as usual, the surface somewhat longitudinally impressed at each side of the broad median line, especially toward apex and base; elytra transverse, barely a third wider and nearly one-half longer than the prothorax, the humeri rather broadly rounding to the prothorax, the surface with sparsely scattered coarse indented pseudo-punctures almost throughout; abdomen moderately tapering from base to apex, the sixth tergite rounded in the female. *Male* unknown. Length 1.7 mm.; width 0.65 mm. New York (Catskill Mts.) .... **subpunctata** n. sp.

Body smaller and stouter, more fusiform and convex, with rather dense integuments, which are distinctly micro-reticulate throughout, testaceous in color, the elytra rather more yellowish and without distinct darker maculation, the abdominal cloud rather large, black or paler and indefinitely limited, the head piceous-black or paler, sparsely punctate laterally; antennae nearly attaining the middle of the elytra, moderately slender, somewhat infuscate distally, the fifth joint slightly elongate, the tenth very feebly transverse, the eleventh much shorter than the two preceding combined, more obtuse at apex than usual; prothorax one-half wider than long, distinctly wider than the head, obtrapezoidal, rounded at the sides anteriorly, the latter feebly converging and less arcuate thence to the base, the surface with the usual punctures distinct, convex; elytra as in *subpunctata* but less transverse and with the indentated punctures smaller and sparser, particularly toward the external apical angles; abdomen strongly conoidal. *Male* with a low polished rounded and slightly transverse tubercle near the apex of the fifth tergite, the sixth with two long and slender, arcuate, incurved and pointed apical processes in median third of the total width, the bottom of the inclosed space transversely subsinuate and almost perfectly even, the adjoining surface transversely swollen and polished; *female* with the sixth tergite broadly arcuato-truncate at apex. Length 1.25–1.4 mm.; width 0.65 mm. Canada (Grimsby), Iowa and Wisconsin (Bayfield) .... **lacustris** n. sp.

Var. A — Form nearly similar but still smaller and more slender, the micro-reticulation of the head and pronotum almost wholly obsolete as are also the large indented punctures of the elytra, these being replaced by the usual very fine sparse and inconspicuous punctures. *Male* with almost identical sexual characters, the flat tubercle of the fifth tergite being smaller, rounded and not transverse, the processes and sinus of the sixth similar. Length 1.1 mm.; width 0.58 mm. Pennsylvania (near Philadelphia) .... **inconspicua** n. var.

13 — Prothorax distinctly or strongly transverse, as a rule, as usual 14

Prothorax but slightly wider than long; body more slender and subparallel 19

14 — Prothorax moderately transverse, generally very distinctly narrower than the base of the elytra 15

Prothorax very strongly transverse, very nearly twice as wide as long....18

15 — General color pale 16

General color dark 17

16 — Form rather stout, moderately convex, polished, feebly micro-reticulate throughout, the head blackish, the elytra feebly infumate at the outer apical angles, the abdominal cloud black, well developed on and near the fourth tergite; head with sparse coarse punctures laterally, the antennae short, slightly longer than the head and prothorax, rather stout, joints five to ten distinctly transverse, those beyond the third or fourth pale brownish-fuscous in color; prothorax slightly, though

obviously, wider than the head, two-thirds wider than long, convex, the sides parallel and broadly, evenly arcuate, the base arcuate, the usual sparse punctures small and inconspicuous; elytra a third wider and nearly one-half longer than the prothorax, the humeri only moderately exposed, rounded, the punctures minute, sparse and indistinct; abdomen broad, parallel, narrowed toward tip. *Male* with four fine feeble oblique and subequidistant cariniform asperities near the tip of the fifth tergite in more than median third, the two median but slightly more widely separated than those of the outer pairs, the sixth with two short and sharply angulate projections in median third, the intervening edge nearly straight but with two very minute, posteriorly and feebly projecting points at the middle; *female* with the sixth tergite evenly subtruncate at tip. Length 1.3–1.5 mm.; width 0.58–0.6 mm. New York (Catskill Mts.) and Pennsylvania (near Philadelphia).
laetula n. sp.

Form nearly as in *laetula* but not so stout and smaller in size, similarly sculptured and colored, except that the antennae from the fourth joint are rather darker or more blackish in tint, the joints fully as transverse; integuments highly polished; prothorax and elytra almost similar. *Male* having four small asperities near the apex of the fifth tergite in rather more than median third, the two inner having the form of very slightly elongate flattened tubercles, very much more widely separated than either from the outer asperities, which have the form of fine elongate carinules; sixth tergite with two very small pointed processes at tip, separated by about a third of the width, the intervening edge rectilinear, continuing the general contour of the apex and apparently not modified in any manner; *female* unknown. Length 1.25 mm.; width 0.51 mm. Rhode Island (Boston Neck)........ ....**rhodeana** n. sp.

Form nearly similar but stouter than in either of the two preceding species, polished, similarly feebly micro-reticulate and similarly colored, the head and prothorax relatively rather larger but similar in form and sculpture; antennae stout, the outer joints transverse, blackish, flavate toward base; elytra a fourth wider and two-fifths longer than the prothorax, the humeri moderately exposed; abdomen broad, subparallel, rapidly and arcuately narrowed at tip. *Male* with four small elongate and subcariniform asperities in more than median third of the fifth tergite and near the apical margin, the asperities mutually almost similar, oblique toward the median line, the two median more abbreviated and slightly more widely separated than either from the two outer; sixth with two small porrect and flattened processes in median third of the apex, the processes rather broad, with their apices rounded, the intermediate space with two very minute approximate acute and porrect processes; *female* unknown. Length 1.4 mm.; width 0.62 mm. New York (Peekskill)......................................**fustifer** n. sp.

Form larger and stouter than in the three preceding, the prothorax much smaller and less transverse, the humeri much more widely exposed, shining, micro-reticulate throughout, pale flavate, the elytra less rufous, not maculate, the abdominal cloud very small, confined to the median part of the fourth tergite; head blackish, paler apically, the antennae stout, extending to about basal third of the elytra, the second joint fully as long as the next two combined, five to ten strongly transverse, blackish, the eleventh dark, nearly as long as the two preceding combined; punctures coarse and rather numerous at each side of the median line; prothorax about equal in width to the head, scarcely more than two-fifths wider than long, the sides rounded, rather more converging and less arcuate toward base, the surface with rather numerous, irregularly disposed, remotely scattered punctures, the usual four in subtransverse line distinct; elytra strongly transverse, fully two-fifths wider and a third longer than the prothorax, the punctures fine and sparse but rather distinct; abdomen broad, subparallel, arcuately narrowing posteriorly, the sixth tergite broadly rounded at apex in the female. *Male* unknown. Length 1.65 mm.; width 0.68 mm. New York (Catskill Mts.)......................**centralis** n. sp.

17 — Body stout, highly polished, the head and elytra without, and the pronotum with barely a trace of micro-reticulation; head black, with numerous coarse punctures except along the middle, the antennae stout, fuscous, slender and flavate at base, extending to basal third of the elytra, the outer joints strongly transverse; prothorax slightly wider than the head, three-fifths wider than long, convex, blackish, the sides long and subparallel, broadly, evenly arcuate, the surface with very few remotely scattered punctures; elytra dark flavo-testaceous, blackish externally toward tip, a third wider and nearly two-fifths longer than the prothorax, the humeri only moderately exposed, rounded, the punctures fine but numerous and rather distinct; abdomen stout, gradually and arcuately tapering from base to apex, rufous, the fourth tergite and most of the fifth black. *Male* with four fine cariniform asperities in median third of the fifth tergite and near the apical margin, also, generally, one feebler exterior to these at each side, the median pair of asperities shorter and more narrowly separated than either from those adjacent exteriorly; sixth with two very acute and slightly incurvate processes in median two-fifths, the inclosed sinus lobed in the middle, the lobe bearing two small approximate and slender processes, extending posteriorly to the line of the apices of the principal processes and feebly diverging from the base; *female* with the sixth tergite broadly and evenly rounded. Length 1.4–1.6 mm.; width 0.7 mm. Wisconsin (Bayfield), — H. F. Wickham.....**perpolita** n. sp.

Body nearly similar to the preceding but stouter, polished, the head with traces of micro-reticulation toward base, the pronotum obsoletely reticulate; coloration nearly similar, the head and prothorax black, the elytra dark piceo-flavate, gradually black externally toward tip, the abdomen in great part black, slightly paler toward base and at tip; head with rather numerous coarse punctures, the antennae blackish and stout except toward base, the outer joints transverse, the second not as long as the next two combined; prothorax much wider than the head, three-fourths wider than long, rounded at the sides anteriorly, thence narrowed to the base, the four punctures behind the middle of the length large and deep, the others very few and feeble; elytra two-fifths wider and one-half longer than the prothorax, the humeri widely exposed, without reticulation, the punctures fine, irregular and close-set, becoming scabrous externally toward tip; abdomen broad, feebly tapering.

Male with secondary characters nearly as in *perpolita*, the carinules near the apex of the fifth tergite generally more subequal among themselves and subequidistant, the two processes from the bottom of the sinus of the sixth tergite parallel, not diverging from the base and usually not quite so approximate; *female* with the sixth tergite very broadly, evenly arcuate at tip. Length 1.4–1.7 mm.; width 0.66–0.75 mm. Colorado (Boulder Co. and Buena Vista)......................**tenebrosa** n. sp.

Body stout, moderately convex, not very highly polished, the entire surface strongly micro-reticulate, uniform dark red-brown in color, the entire abdomen black except at base and apex, the latter slightly paler; head small, feebly punctate, the antennae dark testaceous, the outer joints stout and transverse; prothorax smaller than usual but distinctly wider than the head, three-fifths wider than long, the sides subparallel and broadly arcuate, the base arcuate, broadly margined; surface very remotely and indistinctly punctate, the median line narrowly and slightly elevated throughout the length; elytra two-fifths wider and nearly one-half longer than the prothorax, finely, sparsely and inconspicuously punctured, the humeri well exposed at base; abdomen broad, nearly as wide as the elytra, subparallel, only slightly narrowed at apex; sixth tergite rounded in the female. *Male* unknown. Length 1.4 mm.; width 0.64 mm. Ontario (Sudbury), — H. F. Wickham................**subnitens** n. sp.

18 — Form rather stout, subparallel, convex, polished, micro-reticulate throughout, dark rufo-testaceous in color, the head scarcely darker; elytra dark piceo-flavate, the abdomen with a large blackish cloud at the fourth and fifth tergites; head rather small, convex, feebly, sparsely punctate, the antennae pale throughout, the club loose and stout, the joints transverse; prothorax much wider than the head, nearly twice as wide as long, the sides sensibly converging and broadly arcuate from near the base to the apex, the former broadly arcuate, the punctures remote and small; elytra slightly wider and about a third longer than the prothorax, strongly transverse, finely, sparsely and asperately punctate throughout, each puncture with a coarse erect yellow hair; abdomen at base nearly as wide as the elytra, the sides thence straight and but slightly converging to the apex. *Male* with two posteriorly inclined acute and conspicuous processes, separated by about a sixth of the entire width and midway between base and apex of the fifth tergite, the sixth with two small acute processes in median third at apex, more than median two-thirds of the intermediate space occupied by a large and apically rounded, flat, polished and sculptureless lobe, extending posteriorly beyond the line of apices of the lateral processes, with its edges finely reflexed and extending forward onto the surface of the segment in two fine cariniform lines; *female* with the sixth tergite very broadly, evenly rounded. Length 1.2–1.4 mm.; width 0.52–0.58 mm. Rhode Island (Boston Neck) and Missouri (St. Louis)......**compacta** n. sp.

Form very stout, convex, polished, feebly micro-reticulate, the elytra and abdomen more strongly, black, the prothorax with a very faint piceous tinge, the elytra almost equally feebly rufescent; head relatively rather small, finely, sparsely punctate, the antennae moderately stout distally, with the joints transverse, five to ten black or blackish in color; prothorax much wider than the head, nearly twice as wide as long, the sides somewhat converging from near the apex to the base, the latter broadly arcuate, the remote punctures small; elytra slightly wider and two-fifths longer than the prothorax, with fine and sparse asperulate punctures and rather short darkish hairs throughout; abdomen at base as wide as the elytra, the sides rapidly tapering thence to the tip; sixth tergite rounded in the female. *Male* unknown. Length 1.2 mm.; width 0.62 mm. Pennsylvania (Westmoreland Co.)............**obesula** n. sp.

Form less stout, subparallel, polished, very obsoletely micro-reticulate, the abdomen more finely and distinctly, black, the prothorax slightly piceous, the elytra piceo-flavate, darker externally and apically, the abdomen dark rufous, with the fourth tergite and most of the fifth black; head rather well developed, with sparse and distinct punctures laterally, the antennae stout distally, the outer joints transverse, black beyond the fourth, five to eleven gradually very slightly thicker but producing the general impression of a loose parallel club; prothorax relatively smaller than in the two preceding species, nearly twice as wide as long, only slightly wider than the head, the sides subparallel and rather strongly arcuate, the remotely scattered punctures somewhat distinct; elytra transverse, a fourth or fifth wider and two-fifths longer than the prothorax, the humeri perceptibly exposed, the punctures minute, obsolete toward the scutellum, fine, closer and more distinct near the external apical angles; abdomen arcuately and moderately tapering from base to apex, not quite as wide as the elytra, the sixth tergite rounded in the female. *Male* unknown. Length 1.15 mm.; width 0.51 mm. Mississippi (Vicksburg)................**micans** n. sp.

19 — Form elongate, rather slender, subparallel, polished, not distinctly micro-reticulate except on the abdomen, dusky-testaceous, the elytra dark piceo-flavate, the abdomen paler flavate, with a very small medial cloud near the apex; head rather well developed, with a few scattered punctures toward the sides; antennae pale, only moderately stout, the outer joints not very strongly transverse and gradually very slightly infumate toward tip; prothorax not distinctly wider than the head, a fourth or fifth wider than long, the sides long, subparallel and moderately arcuate, the base broadly rounded, the angles rounded though obvious, the surface with rather numerous small punctures scattered along the medial regions from base to apex; elytra only moderately transverse, two-fifths wider and longer than the prothorax, the humeri somewhat distinctly exposed, rounded, the punctures fine, sparse and indistinct; abdomen subequal in width to the elytra, but little narrowed at tip; sixth tergite rounded or subtruncate in the female. *Male* unknown. Length 1.1 mm.; width 0.45 mm, Pennsylvania (near Philadelphia) and Rhode Island (Boston Neck)...........**egena** n. sp.

Form slender, subparallel, polished, not evidently micro-reticulate, pale flavate, the head but little darker, the elytra infumate posteriorly, the abdomen scarcely maculate; head with a few sparse punctures, feebly impressed at each side of the middle, the impressions connected by a feeble transverse impression behind the frontal margin; antennae flavate, the outer joints moderately transverse; prothorax subequal in width to the head, about a fourth wider than long, rounded at the sides, the latter more converging toward apex from near the middle than toward base, the surface with a few sparse punctures; elytra two-fifths wider and longer than the prothorax, with a few sparse punctures, especially evident toward base, the humeri distinctly exposed; abdomen slightly narrower than the elytra, parallel and straight at the sides, moderately narrowed posteriorly only near the apex; female with the sixth tergite broadly rounded. *Male* characters obscured in the type but apparently feeble. Length 1.25–1.35 mm.; width 0.42–0.51 mm. Ontario (Toronto)..............................**exilis** n. sp.

The above is only the first rude attempt to bring order out of chaos and may not represent the most natural succession of the species in this hitherto neglected genus. There are, for example, several transitions between the species having the antennae decidedly increasing in thickness from the fifth joint to the tip and those having joints five to eleven parallel, and I do not believe that this is an altogether natural subdivision. These transitional forms are mentioned, however, in the above descriptions and will probably not give rise to much uncertainty in identification. The principal object at the present time is to bring forward such characters as may be easily recognized, in order that the species may be identified and further study and collecting encouraged. The next revision, with fuller material, may enable the reviewer to give a more natural classification, perhaps based primarily upon the very pronounced secondary sexual modifications of the male.

The species identified above as *flavicornis* Mels., varies in color more than any other that I have observed, the usual coloration being dark but varying from this to almost wholly flavate. *Inconspicua* has very nearly the same secondary sexual characters as *lacustris*, except that the tubercle of the fifth tergite is rather smaller and more circular and it is therefore very closely related, although lacking the peculiarly pitted elytra characterizing the three species of that immediate group. For the present, therefore, I have regarded it as a subspecies of *lacustris*. In the Henshaw list a species "*affinis* Fauv.," is inscribed; *affinis* Sahlb., is undoubtedly intended, but there is no American species before me corresponding in sexual characters to the examples of that species forwarded by Mr. Reitter and taken in the Caucasus. I have also been unable to identify the *rufa*, of Melsheimer, doubtfully referred to *Gyrophaena*.

Additional Miscellaneous Aleocharinae.

While the present paper was waiting for the press I took occasion to draw up descriptions of some more especially interesting species, which may be advantageously published at the present time as follows:—

ALEOCHARINI.

Ocalea Er.

Form rather stout, convex, strongly shining, dark testaceous, the elytra shaded somewhat darker externally toward apex and narrowly along the suture, the head and abdomen piceous-black; legs pale, the antennae blackish, gradually paler toward base; surface only very obsoletely micro-reticulate, the elytra more distinctly, the abdomen excessively minutely strigilate in transverse wavy lines; head parallel at the sides, obliquely constricted at base, feebly and rather sparsely punctate, the antennae long, gradually and moderately incrassate distally, the tenth joint not quite as long as wide, the eleventh scarcely as long as the two preceding combined; prothorax large, fully one-half wider than the head and a third wider than long, the sides broadly subangulate at about the middle, thence strongly converging to the apex, which is much narrower than the base; surface evenly convex, finely, sparsely punctate, with a small transverse discal impression before the scutellum; elytra large, only just visibly wider and nearly one-half longer than the prothorax, finely, closely and asperulately punctured; abdomen at base somewhat narrower than the elytra, gradually tapering thence to the apex, finely, sparsely punctate throughout, the vestiture rather long but sparse, elsewhere short; mesosternal process extending to apical fourth of the coxae, extremely acute at tip and free, the metasternum scarcely at all entering between the coxae, obtusely angulate, the long intermediate isthmus narrowly convex transversely. Length 3.4 mm.; width 0.88 mm. California (Siskiyou Co.).........**grandicollis** n. sp.

Form and coloration nearly as in the preceding, the elytra scarcely perceptibly shaded darker externally but more distinctly in the region of the scutellum, quite as convex and polished, the micro-reticulation almost wholly obsolete, even on the elytra, the strigilation of the abdomen coarser but very nearly obsolete; vestiture sparse and inconspicuous; head larger but similar in form, finely, sparsely punctate, the antennae rather shorter, extending barely to the middle of the elytra but otherwise nearly similar, the eleventh joint more pointed and as long as the two preceding combined; prothorax relatively smaller, not subangulate at the sides, the latter subparallel and broadly, evenly arcuate, the basal angles more obtusely rounded and less distinct, only about a third wider than the head and equally transverse, the apex but little narrower than the base; surface finely, sparsely punctate, with a small transverse impression before the scutellum; elytra nearly a fourth wider and one-half longer than the prothorax, less finely and not so closely punctate; abdomen subparallel, narrower than the elytra, narrowed slightly posteriorly only near the apex, similarly finely and sparsely punctate throughout and with the first three tergites narrowly and deeply impressed at base; middle coxae contiguous, the mesosternal process acutely angulate but only extending to the middle, the metasternum still more obtusely abbreviated. Length 3.2 mm.; width 0.82 mm. California (Sta. Cruz Mts.)............**franciscana** n. sp.

These species both have the prothorax much more developed than in the more northern *vancouveri* Csy., and agree nearly with European species of the *picata* type.

Chilopora Kr.

Form slender, subparallel, strongly convex, shining, dark red-brown in color, the head and abdomen behind the third segment blackish; legs pale brownish-flavate, the antennae infumate, gradually pale basally; pubescence short, inconspicuous, fine, moderately dense but scarcely sericeous on the abdomen; head fully as long as wide, parallel, abruptly and obliquely constricted at base, the eyes slightly prominent, the punctures fine and sparse, the surface polished; antennae long, extending to about the tips of the elytra, slender toward base but gradually rather strongly incrassate distally, the tenth joint longer than wide, the eleventh obtusely pointed and as long as the two preceding combined; prothorax but little wider than the head, distinctly longer than wide, widest at about apical two-fifths, the sides broadly rounded, feebly converging and straight toward base, the latter much wider than the apex; surface finely, sparsely and subgranularly punctate with polished interspaces, except rather narrowly along the middle, where the punctures are dense and the surface feebly impressed toward base behind the middle; elytra about a third wider and a fourth longer than the prothorax, finely, closely punctate; abdomen parallel, slightly narrower than the elytra, extremely minutely and rather closely punctulate; middle coxae contiguous, the mesosternal process very acutely angulate, extending to about the middle, the metasternum short but rather acutely angulate, the long isthmus acutely compressed. Length 3.8 mm.; width 0.7 mm. New York (Peekskill).........**americana** n. sp.

Form slender, convex, blackish-castaneous in color, the head and posterior part of the abdomen black; legs slender, pale flavate, the antennae black, becoming piceo-testaceous toward base; integuments opaque, extremely minutely, subgranularly and densely punctate, the abdomen still more minutely but simply and very closely punctulate, less minutely and closely in the three basal depressions, the pubescence short, very close, especially on the abdomen; head as long as wide, rounded at the sides of the base, the eyes not at all prominent; antennae not quite extending to the tips of the elytra, gradually and rather strongly incrassate distally, the tenth joint not quite as long as wide; prothorax distinctly wider than the head, fully as long as wide, widest at anterior two-fifths, where the sides are rather strongly arcuate, thence rounding to the apex and feebly converging and somewhat sinuate toward base; surface narrowly and very feebly impressed along the median line throughout, with a somewhat more pronounced impression before the scutellum; elytra two-fifths wider and a third longer than the prothorax, the crowded punctures less minute and more evident than on the latter; abdomen parallel, distinctly narrower than the elytra, the first three tergites strongly and rather narrowly impressed at base; mesosternal process extending, somewhat more posteriorly than in *americana*. Length 3.4 mm.; width 0.65 mm. North Carolina (Asheville) and Pennsylvania (Philadelphia)..........**fuliginosa** n. sp.

The first of the above species is closely allied to the European *rubicunda* Er., but has a broader neck, the latter having the neck about two-thirds as wide as the head, while in *americana* it is about three-fourths as wide; there are also several other minor differences. The second species more nearly resembles *longitarsis*, but is more slender and with relatively much smaller elytra.

Pachycerota n. gen.

It is probable that this genus, though very isolated, will prove to be more closely related to *Ilyobates* than to any other at present described. The body is rather stout, moderately convex, densely sculptured, the mesosternal process moderately narrow, flat, extending to apical third or fourth of the coxae, with its arcuato-truncate apex slightly free and not quite attaining the narrowly rounded tip of the elongate metasternal projection. The mentum is transverse, coriaceous at tip, the processes of the ligula long, slender and contiguous, the palpi moderate and setose, the eyes moderately developed, anterior and somewhat finely faceted, the antennae short, compact and very stout, the neck rather abruptly and deeply constricted and about two-thirds as wide as the head and the first three abdominal segments somewhat broadly and subequally impressed at base. The legs are moderate in length, the tarsi somewhat short, the posterior slender and two-thirds as long as the tibiae, with the basal joint distinctly longer than the next two combined. The type may be described as follows: —

Body moderately stout and convex, dull in lustre, the elytra more shining and the abdomen still more so, densely and rather coarsely microreticulate, the reticulation very strong, obscuring the punctuation, rugulose on the head, larger and feebler on the elytra and very feeble on the abdomen; color black or blackish when mature, the elytra slightly paler, rufescent, the tip of the abdomen pale; legs pale testaceous, the antennae black, paler toward base; pubescence moderately long and coarse, subdecumbent; head slightly elongate, parallel and nearly straight at the sides, the eyes before the middle and prominent, the basal angles broadly rounded; surface with a shining and less sculptured median line expanding in front; antennae scarcely as long as the head and prothorax, very thick, the outer joints very transverse and compactly joined, the second joint elongate and slightly longer than the third, fourth transverse, four to eleven gradually wider, the latter as long as the two preceding and very obtusely rounded at tip; prothorax very nearly as long as wide, almost a third wider than the head, the sides parallel and nearly straight, rounding and converging anteriorly to the apex, the basal angles obtuse; base strongly arcuate, the surface not impressed; elytra a third wider than the prothorax and equal to the latter in length, the sides feebly arcuate, slightly diverging from the humeri, which are but very slightly exposed at base; external apical angles and scutellar region black; abdomen slightly narrower than the elytra, parallel, finely, not very densely punctate, closely and more coarsely so in the basal impressions. Length 3.0 mm.; width 0.8 mm. Massachusetts to Iowa.............. **duryi** n. sp.

This species does not appear to be rare and generally occurs with ants of large size and black color. I have received it from Messrs. Chas. Dury, of Cincinnati, and H. F. Wickham, and from the late P. Jerome Schmitt, of Westmoreland Co., Penn.

Gennadota n. gen.

The species described by the writer under the name *Callicerus puberulus* (Ann. N. Y. Acad. Sci., VII, p. 310), has the anterior tarsi five-jointed and therefore constitutes a genus allied to *Ocalea* and more especially to *Chilopora*, having a structure of the intermesocoxal parts nearly similar to the latter, but differing in having the first four tergites impressed at base, as well as in its coarser, sparser sculpture, coarse pubescence, shorter, thicker tarsi and general facies.

From *Ilyobates*, which has a somewhat similar abdomen, it differs in its more slender and acutely aciculate mesosternal process and pointed antennae. Assuming *Callicerus obscurus* Grav., to be the type of *Callicerus*, there can be no doubt of its four-jointed anterior tarsi and that its proper place is among the Myrmedoniini, where it is wholly isolated by its remarkable antennae. Besides the type of *Gennadota*, a second species has recently been discovered, which may be briefly described as follows: —

Stout, parallel, convex, polished, not micro-reticulate except very obsoletely on the elytra, the abdomen extremely finely but obsoletely strigilate in wavy transverse lines, castaneous, the head rather more piceous and the elytra pale brownish-rufous throughout; legs pale, the antennae fuscous, with the first joint testaceous; pubescence rather long, coarse, moderately sparse and distinct; head fully as long as wide, parallel, abruptly and obliquely constricted at base, finely and sparsely punctate, the eyes slightly prominent; antennae not quite attaining the middle of the elytra, moderately thick, but little enlarged distally beyond the fifth joint, the subapical joints slightly wider than long, the eleventh ogivally pointed, as long as the two preceding combined; prothorax about two-fifths wider than long and two-fifths wider than the head, the sides subparallel and broadly, evenly arcuate throughout, more converging apically, the apex very distinctly narrower than the base; surface finely, rather sparsely punctate and evenly convex, except a small transverse ante-scutellar impression; elytra large, nearly a third wider and one-half longer than the prothorax, strongly impressed on the suture behind the scutellum, very distinctly, somewhat closely and asperulately punctured; abdomen parallel, evidently narrower than the elytra, finely, sparsely punctate, the four subequal strong basal impressions rather coarsely but not more densely punctate. Length 3.8 mm.; width 1.0 mm. Canada.

canadensis n. sp.

This species differs conspicuously from *puberula* in its more transverse, more finely and sparsely punctate prothorax, not narrowed toward base and not broadly impressed on the median line behind the middle and also in its smaller head, among other characters. The European species previously referred to by me as *Callicerus rigidicornis*, will form a new genus allied to *Ilyobates*.

Phloeopora Er.

Form stouter, parallel, somewhat depressed, piceous-black, the elytra rufous behind basal third at the suture, to apical third at the sides; legs pale brown throughout, the antennae dark, paler toward base; surface dull, the head and prothorax strongly micro-reticulate, each of the minute and rather close-set punctures at the centre of a somewhat larger polygon, the elytra more shining, feebly reticulate, closely, somewhat asperately and more distinctly punctate, the abdomen only reticulate toward tip, finely, rather closely punctate; pubescence short, not conspicuous; head and antennae as in *reptans*, the former smaller in size, the eyes rather less prominent; prothorax about a fourth wider than long and nearly a third wider than the head, the sides subparallel, broadly arcuate anteriorly, very feebly converging and straight toward base, the basal angles slightly obtuse and narrowly rounded; surface very obsoletely, transversely impressed before the scutellum; elytra about a fifth or sixth wider and a third longer than the prothorax, the humeri very slightly exposed at base; abdomen parallel, much narrower than the elytra, the first four tergites subequally impressed at base. Length 2.6 mm.; width 0.62 mm. Oregon (The Dalles), — H. F. Wickham.

oregona n. sp.

Form very slender, parallel, convex, shining, blackish-piceous, the elytra gradually rufous posteriorly, the abdomen wholly black; legs brown, the antennae fuscous, slightly paler basally; integuments very obsoletely micro-reticulate, the elytra not at all so, the abdomen only reticulate toward tip; head large, fully as long as wide, abruptly constricted at base, the eyes well developed and rather prominent; antennae moderately incrassate distally, but little longer than the head and prothorax, the outer joints transverse; prothorax scarcely as wide as the head, as long as wide, parallel, the sides broadly rounded anteriorly, thence very feebly converging and nearly straight to the distinct basal angles, the punctures, like those of the head, fine and sparse, the surface not at all impressed at any point; elytra fully a third wider and a fourth longer than the prothorax, the humeri well exposed at base, the punctures moderately fine but very distinct, somewhat close-set; abdomen perfectly parallel to the tip of the fifth segment, with straight sides, distinctly narrower than the elytra, finely, moderately closely punctate, the first three tergites strongly, the fourth more narrowly and less deeply impressed at base. Length 1.85 mm.; width 0.42 mm. Iowa and North Carolina................................**sublaevis** n. sp.

The genus *Phloeopora*, as generally recognized, is somewhat composite. The general facies, for example, of *reptans* or the allied *oregona*, on the one hand, and *sublaevis* or the nearly allied European *corticalis* on the other, being quite different and the last has only the first three tergites impressed at base. *Ferruginea* differs much in general appearance, because of the more strongly converging sides of the prothorax toward base, but is evidently more closely allied to the *reptans* than to the *corticalis* group of the genus. *Sublaevis* was formerly identified by me as *latens* Er., but as this species is given in the catalogue of Heyden, Reitter and Weise as European, with several European synomyms appended, and, as it is apparently a smaller species than that indicated by Erichson in his description, I have concluded to regard it as distinct.

Nasirema Csy.

This genus is allied rather closely to *Phloeopora* but differs in its much larger and thicker antennae, with more obtuse terminal joint, among other characters. The following species is very distinct in general appearance:—

Slender, parallel, strongly convex, polished, dark rufo-castaneous, the elytra slightly paler rufous, the legs brownish-flavate, the antennae fuscous, paler toward base; integuments very faintly micro-reticulate throughout; pubescence fine, rather sparse, decumbent; head fully as long as wide, finely, sparsely punctulate, the eyes rather small; antennae longer than the head and prothorax, very thick distally, the outer joints closely joined and strongly transverse, the last but little longer than wide, very obtusely rounded at tip; prothorax distinctly wider than the head, only slightly wider than long, parallel, the sides evenly arcuate almost throughout, the surface even, not impressed at any point, finely, sparsely punctulate; elytra about a fifth wider and a fourth longer than the prothorax, finely and closely but more distinctly punctate, the humeri scarcely at all exposed at base, parallel, the sides evenly arcuate; abdomen distinctly narrower than the elytra, parallel and straight at the sides, very minutely, rather sparsely punctulate, the first three tergites strongly and equally impressed and somewhat more coarsely punctate at base, the fourth wholly without trace of basal impression. Length 2.25 mm.; width 0.48 mm. Iowa (Iowa City), — H. F. Wickham.
inquilina n. sp.

Differs greatly from *humilis* and *parviceps* in its polished and sparsely punctulate integuments, but apparently congeneric; it occurs in the nests of a rather large brown ant.

Oxypoda Mann.

The following species are additional to those previously published by the writer (Ann. N. Y. Acad. Sci., VII, pp. 290–300).

Last antennal joint moderate in size, not longer than the two preceding combined.. 2

Last joint much elongated, distinctly longer than the two preceding.....15

2 — Prothorax subparallel and arcuate at the sides, the apex not very much narrower than the base.. 3

Prothorax subconical or with the apex strikingly narrower than the base. 8

3 — Prothorax strongly transverse.................................... 4

Prothorax nearly as long as wide.. 7

4 — Base of the prothorax fully as wide as the base of the elytra......... 5

Base of the prothorax narrower than the base of the elytra.............. 6

5 — Body moderately slender and convex, subparallel, slightly shining, dark brownish-testaceous, the head black, the abdomen piceous-black, the elytra slightly clouded externally and broadly near the scutellum; legs and antennae pale, the latter slightly infumate distally; punctures very fine and close-set throughout; head wider than long, inflated behind the well developed eyes, which are not at all prominent; antennae very short, feebly incrassate distally, but little longer than the head and prothorax, the outer joints close-set and transverse, the second much longer than the third; prothorax two-thirds wider than the head and three-fifths wider than long, evenly convex throughout; elytra equal in width to the prothorax throughout and a third longer; abdomen at base slightly narrower than the elytra, only feebly tapering thence to the apex, the second and third impressions extremely feeble; metasternal intercoxal angle very short and obtusely rounded, more than three times as wide as long. Length 2.6 mm.; width 0.65 mm. Virginia (Norfolk)..................................**mimetica** n. sp.

Body slightly stouter and more fusoid, quite as convex, slightly shining, very minutely, moderately closely punctured, pale brownish-testaceous, the head and abdomen blackish, the latter pale at tip; legs pale, the antennae fuscous except toward base; pubescence longer than usual and more shaggy; head only slightly wider than long, not at all inflated behind the eyes, which are well developed and slightly convex; antennae extending to basal third of the elytra, the outer joints distinctly wider than long, the second longer than the third; prothorax evenly convex, three-fourths wider than the head and three-fourths wider than long, the sides strongly arcuate; elytra at base equal in width to the prothorax, at tip slightly wider, about two-fifths longer; abdomen at base much narrower than the elytra, strongly tapering thence to the tip, the sides straight, the second and third impressions rather feeble. Length 2.2 mm.; width 0.68 mm. Iowa (Iowa City), — H. F. Wickham. **amica** n. sp.

6 — Form very elongate, rather slender, more depressed than usual, shining anteriorly, the abdomen dull, testaceous, the head piceous-black, the abdomen with a feeble cloud involving the fourth tergite and most of the fifth; legs and antennae pale, the latter slightly fuscous apically; punctures fine, sparse on the head, closer on the prothorax and elytra, very much more minute and excessively dense on the abdomen; pubescence somewhat long and shaggy anteriorly, very short and decumbent on the abdomen; head rather longer than wide, just visibly inflated behind the moderately convex eyes; antennae extending to the middle of the elytra, very slender toward base, gradually and distinctly incrassate distally, the subapical joints slightly wider than long, the eleventh fully

as long as the two preceding or somewhat longer, the second and third very long and slender, the former somewhat the shorter; prothorax one-half wider than the head and two-fifths wider than long, the sides strongly, evenly arcuate; elytra a fifth wider and two-fifths longer than the prothorax; abdomen slightly narrower than the elytra, parallel toward base, feebly tapering in apical half, the three basal impressions rather strong; metasternal angle pronounced, right. Length 3.2 mm.; width 0.8 mm. Maine (Rangeley Lake)....................**sylvia** n. sp.

7 — Moderately stout, convex, shining, deep black, the legs and the basal joint of the antennae pale piceo-testaceous; pubescence short, subdecumbent and not very conspicuous; punctures fine and only moderately close-set even on the abdomen, slightly larger, denser and asperulate on the elytra; head small, as long as wide, arcuately narrowed behind the somewhat prominent eyes; antennae long, attaining apical third of the elytra, gradually and moderately incrassate distally, the subapical joints somewhat longer than wide, the second shorter than the third; prothorax fully four-fifths wider than the head, barely a third wider than long, the sides evenly and strongly arcuate, the surface strongly convex, very feebly, subtransversely impressed before the scutellum; elytra throughout equal in width to the prothorax, about a third longer, almost as long as wide; abdomen at base barely narrower than the elytra, only very feebly tapering thence to the tip, the three basal impressions distinct; metasternal angle very short, obtusely rounded, about four times as wide as long. Length 3.0 mm.; width 0.8 mm. Missouri (St. Louis)..................................**lucidula** n. sp.

8 — Body moderately slender, the abdomen tapering posteriorly at least from the middle.. 9

Body excessively slender, linear, small in size, the abdomen straight and parallel at the sides or at the sides of the dorsal plates..............14

9 — Prothorax widest at some distance before the base, less transverse than usual; antennae thick and long. Body nearly as in *lucidula*, the prothorax smaller and much more narrowed toward apex, deep black, the elytra somewhat piceous, the legs and basal joint of the antennae pale piceous-brown; pubescence fine, subdecumbent, not very conspicuous, the surface rather shining, finely, moderately closely punctate, more strongly and densely so on the elytra, more minutely and much more closely on the abdomen than in *lucidula*; head wider than long, arcuately constricted behind the eyes, which are large but not prominent; antennae thick, moderately slender toward base, extending almost to the tips of the elytra, the subapical joints slightly elongate, the eleventh pointed, lobed in apical third as in *lucidula*, the second and third subequal; prothorax fully three-fourths wider than the head, a third wider than long, the sides strongly rounded toward base, becoming strongly convergent and straighter anteriorly to the apex; surface very feebly impressed before the scutellum; elytra sensibly wider than the prothorax and barely a third longer; abdomen slightly narrower than the elytra, tapering very feebly behind the middle, the three impressions distinct; metasternal angle nearly as in *lucidula*. Length 2.8 mm.; width 0.85 mm. New York (near the city.)..............**stygica** n. sp.

Prothorax widest at or near the base, more transverse; antennae small and slender..10

10 — Species occurring west of the Rocky Mountains. Form moderately stout and convex, rather dull, minutely, densely punctate, with short, dense, fine and decumbent vestiture, dark piceo-rufous in color, the head slightly darker, the abdomen blackish, the segments all nubilously rufescent toward tip; legs very pale, the antennae infuscate distally; head wider than long, the eyes large but not prominent; antennae feebly incrassate distally, about as long as the head and prothorax, the subapical joints transverse, the second distinctly longer than the third; prothorax strongly conical, four-fifths wider than the head, two-fifths wider than long, widest at base, the sides thence strongly converging, evenly but only very feebly arcuate to the apex, the surface not impressed; elytra equal in width to the prothorax, parallel, only about a fourth longer; abdomen at base evidently narrower than the elytra, the sides thence distinctly converging to the apex, the second and third impressions very feeble. Length 2.75 mm.; width 0.8 mm. Nevada (Reno)..**renoica** n. sp.

Species of the Atlantic faunal regions to the eastern base of the Rocky Mountains..11

11 — Metasternal angle pronounced, projecting between the coxae as far as the free and aciculate tip of the mesosternal process................12

Metasternal angle very short and obtuse, scarcely entering the intermesocoxal space..13

12 — Form stout and strongly convex, slightly shining, the elytra and abdomen dull, the punctures being very dense, less dense anteriorly, very fine throughout, the vestiture short and dense; color blackish-piceous, the elytra uniform and paler, the abdomen blackish, the segmental apices slightly and nubilously paler; legs and the antennae gradually toward base testaceous, the remainder of the latter black; head suborbicular, convex, somewhat transverse, the eyes well developed but not prominent; antennae slender, feebly incrassate distally, attaining basal third of the elytra, the subapical joints slightly transverse, the second somewhat shorter than the third, both considerably elongated; prothorax large, strongly convex, unimpressed, scarcely two-fifths wider than long, four-fifths wider than the head, the sides rather strongly converging, evenly and distinctly arcuate from base to apex; elytra at base scarcely as wide as the prothorax, but, at apex, distinctly wider, scarcely visibly longer; abdomen at base but little narrower than the elytra, strongly tapering thence to the apex, the second and third impressions very feeble. Length 3.1 mm.; width 0.92 mm. Iowa (Iowa City), — H. F. Wickham..................**iowensis** n. sp.

Form rather stout, very small in size, convex, alutaceous, black, the apices of the ventrals narrowly pale, the fifth more broadly and the sixth entirely; legs and the antennae toward base piceo-testaceous; punctures minute and dense throughout; vestiture fine, short, rather indistinct; head orbicular, not much inflated basally, the eyes moderate, feebly convex; antennae attaining basal third of the elytra, slender basally, rather strongly incrassate toward tip, the subapical joints transverse, the second much longer than the third; prothorax four-fifths wider than the head, nearly two-thirds wider than long, the sides rather strongly converging from base to apex, evenly and somewhat strongly arcuate, the surface not impressed; elytra fully as wide as the prothorax and a third longer; abdomen at base much narrower than the elytra, strongly and evenly tapering thence to the apex, with the sides straight, the first two impressions distinct, subequal, the third obsolete. Length 1.7 mm.; width 0.55 mm. Colorado (Boulder Co.)..**ancilla** n. sp.

Form much less stout and convex, more linear, small in size, shining, pale testaceous, the head slightly darker, the abdomen feebly infumate posteriorly except at apex; legs and the antennae gradually toward base pale testaceous; punctures very minute but somewhat sparse, slightly less minute and closer on the elytra, moderately close-set on the abdomen; pubescence short, rather inconspicuous; head wider than long, inflated at base, the eyes unusually small, not at all prominent; antennae scarcely longer than the head and prothorax, the subapical joints transverse, the second very much longer than the third; prothorax about two-thirds wider than the head and one-half wider than long, the sides becoming distinctly convergent and less arcuate toward apex, the surface not impressed; elytra transverse, at base slightly narrower than the prothorax, at apex about equal in width, about equal in length, rather depressed; abdomen at base almost as wide as the elytra, parallel to the middle, then slightly tapering to the tip, the three basal impressions distinct. Length 2.0 mm.; width 0.51 mm. Missouri (St. Louis)..........................**simulans** n. sp.

13 — Form moderately slender, convex, alutaceous, very finely, closely punctate, the punctures of the elytra and abdomen unusually asperate; pubescence very short and somewhat inconspicuous throughout; color pale rufo-testaceous, the head and entire abdomen black; legs and antennae pale, the latter infuscate and feebly incrassate apically, extending to basal third of the elytra, the subapical joints transverse, the second much longer than the first or third; head more shining, orbicular, convex, about as long as wide, the eyes well developed, slightly convex; prothorax about one-half wider than the head, barely one-half wider than long, the sides feebly and evenly arcuate but only moderately converging from base to apex and much less so than in the the two following species, the surface with a small rounded discal impression before the scutellum; elytra at base slightly narrower than the prothorax but at apex fully as wide, between a fourth and a third longer; abdomen at base evidently narrower than the elytra, feebly tapering posteriorly only behind the middle, the second and third impressions very feeble. Length 2.4 mm.; width 0.62 mm. Missouri (St. Louis)..**truncatella** n. sp.

Form less slender, feebly shining, piceous-black, the abdomen black, nubilously pale at the apices of the fifth and sixth dorsals; legs and antennae pale, the latter infuscate distally; punctures very fine, close-set, those of the elytra equally dense but larger and more asperate, the asperities of the abdomen elongate; pubescence fine, very short, rather dark, sericeous; head slightly transverse, distinctly inflated at base, the eyes rather small, not prominent; antennae about as long as the head and prothorax, feebly incrassate distally, the subapical joints only slightly transverse, the second very much longer than the third; prothorax two-thirds wider than the head and nearly two-thirds wider than long, the sides strongly converging and broadly, feebly arcuate from very near the base to the apex, the surface wholly unimpressed; elytra at apex as wide as the prothorax, at base very slightly narrower, about a fourth longer; abdomen at base very slightly narrower than the elytra, feebly, almost evenly tapering thence to the apex, the second and third impressions almost obsolete. Length 2.75 mm.; width 0.7 mm. Virginia (Fort Monroe)............................**virginica** n. sp.

Form distinctly more slender than in *virginica*, convex, rather shining, castaneous, the head and abdomen black, the apices of the fifth and sixth ventrals nubilously paler, the elytra each with a nubilously rufous oblique line from the humerus to the suture at apex; legs pale, the antennae fuscous, pale basally; punctures anteriorly very fine and close-set, of the elytra and abdomen distinctly though narrowly separated and asperulate; vestiture pale, fine and decumbent, scarcely sericeous; head less transverse and less inflated at base than in *virginica*, with larger eyes, the antennae nearly similar; prothorax three-fifths wider than long, nearly as in *virginica* but with a small and very feeble rounded impression on the disk before the scutellum; elytra equal in width to the prothorax and barely a fifth longer; abdomen in form, taper and relationship with the elytra nearly as in *virginica* but narrower and much less closely and less asperately punctate, the second and third impressions feeble but more distinct. Length 2.7 mm.; width 0.67 mm. Virginia (Norfolk).....................**obliqua** n. sp.

14 — Body linear, convex, alutaceous in lustre, pale testaceous, the head piceous, the abdomen infumate from the base of the third dorsal, the apices feebly paler; legs and antennae pallid; punctures very fine and close-set, those of the elytra and abdomen more asperulate, the abdominal sculpture becoming feebly imbricate toward base; pubescence very short and close-set; head suborbicular, the eyes small; antennae about as long as the head and prothorax, distinctly incrassate distally, the subapical joints moderately transverse, the second much longer than the third; prothorax barely one-half wider than the head, two-fifths wider than long, the sides feebly arcuate and only moderately converging from base to apex, the surface unimpressed; elytra small, distinctly narrower than the prothorax throughout and evidently shorter; abdomen obviously narrower than the elytra, the second and third impressions narrow but distinct; metasternal projection finely angulate, extending to the free aciculate tip of the mesosternum. Length 2.1 mm.; width 0.45 mm. Missouri (St. Louis) and Mississippi (Vicksburg)....................................**perexilis** n. sp.

15 — Prothorax narrowed gradually from base to apex, with the sides evenly and strongly arcuate throughout....................................16

Prothorax widest behind the middle, the sides thence feebly converging to the base and more strongly and less arcuate to the apex.............17

16 — Body moderately slender, convex, alutaceous, deep black throughout, the abdomen slightly paler at tip; antennae blackish to the base, the legs piceo-testaceous; punctures extremely minute and close-set

throughout, especially on the abdomen, least close on the elytra, which are also micro-reticulate; pubescence fine, plumbeous and inconspicuous; head inflated toward base, the eyes moderate, not prominent; antennae attaining basal third of the elytra, gradually and distinctly incrassate distally, the subapical joints transverse, the eleventh obtusely pointed, not quite as long as the three preceding combined, the second almost as long as the next two together; prothorax twice as wide as the head and nearly three-fifths wider than long, the sides strongly converging from base to apex, the basal angles distinct and but little rounded, the surface unimpressed; elytra equal in width to the prothorax and very slightly longer; abdomen at base evidently narrower than the elytra, moderately tapering thence to the tip, the second impression nearly as deep as the first, the third feeble. Length 2.7 mm.; width 0.67 mm. Ontario (Trenton).......................**lacustris** n. sp.

Body rather stouter and less convex, dull, the abdomen shining, dark castaneous, the abdomen and antennae, except the basal joint of the latter, blackish, the legs pale red-brown; punctures very fine and dense, graniliform on the elytra, asperulate and much less close-set on the abdomen; pubescence fine, dense, pale and conspicuous, longer and less evident on the abdomen; head transverse, the eyes large but not at all prominent; antennae almost attaining basal third of the elytra, gradually and strongly incrassate distally, the subapical joints moderately transverse, the eleventh evidently longer than the two preceding combined, the second but slightly longer than the third; prothorax only feebly narrowed from base to apex, four-fifths wider than the head, fully two-fifths wider than long, the basal angles broadly rounded, the surface wholly unimpressed; elytra parallel with slightly arcuate sides, everywhere obviously narrower than the prothorax and only slightly longer; abdomen at base very distinctly narrower than the elytra, moderately and evenly tapering thence to the tip, the sides straight, the three basal impressions rather wide and distinct, the third less deep. Length 2.75 mm.; width 0.7 mm. Nevada (Reno)....**nevadensis** n. sp.

17 — Form rather stout, moderately convex, narrowed anteriorly and posteriorly, dull in lustre, black or piceous-black throughout, the elytra very slightly paler and more rufous, the punctures throughout excessively minute and dense, not at all asperulate even on the abdomen; pubescence very short, dense, slightly fuscous and moderately distinct; head wider than long, not inflated at base, the eyes large but not prominent; antennae thick, extending to the middle of the elytra, the subapical joints evidently though not strongly transverse, the eleventh not as long as the preceding three combined, the first three equal in length and elongate, the first slightly the thickest; prothorax one half wider than the head and about two-fifths wider than long, the surface convex, very feebly impressed along the median line throughout, with a deeper rounded impression of the same width before the middle of the base; elytra large, at base equal in width to the prothorax, at apex very disdistinctly wider, two-fifths longer; abdomen at base broad but narrower than the elytra, strongly tapering thence to the tip, with the sides feebly and evenly arcuate, the first impression alone distinct, the second and third obsolete; metasternal projection angulate, advancing between

the coxae. Length 2.4 mm.; width 0.78 mm. California (Pomona Mts.), — H. C. Fall.................................**fusiformis** n. sp.

The various genera that have been made at the expense of *Oxypoda* are not discussed at present, but, from cursory observation, they seem to be less well defined than those allied to *Aleochara*. *Amica*, of the above table, was sent to me gummed with a very large ant, having a rufous head, piceous abdomen and dark brown intermediate parts, but it is probably merely incidentally inquilinous. *Perexilis* is not rare in the Mississippi Valley but is solitary, like most of the Oxypodae, which fact accounts largely for the paucity of individuals representing the very numerous species at present in collections; a specimen before me from New York also represents *perexilis*, in all probability, differing only in a few very insignificant points. *Fusiformis* is allied to *gatosensis*, of Bernhauer, a specimen of which was very kindly given me by Dr. Fenyes, but it is stouter and more fusiform, with larger and more transverse elytra, more transverse subapical and less elongate eleventh joints of the antennae, with several other differential characters; in *gatosensis* the last antennal joint is as long as the preceding three combined; these two species constitute a peculiar and rather isolated geographic group of the genus.

Dasyglossa Kr.

The species which I described several years ago under the name *Oxypoda congruens* (Ann. N. Y. Acad. Sci., VII, p. 292), is evidently the one recently identified as the European *Dasyglossa prospera* Er. It is abundant in the northern Rocky Mountain regions, extending eastward as far as Lake Superior and may be cosmopolitan, or at least widely distributed in the northern hemisphere.

Hylota n. gen.

This genus differs greatly from *Dasyglossa* in having the metasternal projection advanced between the coxae until it meets the mesosternal process, which is however free, and it differs from both *Oxypoda* and *Dasyglossa* in that the mesosternal process is narrowly truncate at tip. The tarsi are 5-5-5-jointed, the general form as in *Oxypoda* but with much coarser and sparser sculpture, especially of the abdomen. The hypomera are visible from the sides, the tarsi rather short, the basal joint of the posterior about as long as the next two combined. Additional characters may be derived from the following diagnosis of the only species known to me thus far:—

Body stout, convex, opaque and micro-reticulate, the abdomen more shining and with feebly imbricate sculpture; pale ochreous-yellow in color, the abdomen with a very faint cloud involving the fourth tergite; legs and antennae pale; punctures moderately fine and and rather close-set, less close on the abdomen; pubescence pale, rather long and shaggy; head orbicular, rapidly narrowed behind the eyes to the base, the eyes large, somewhat prominent; antennae about as long as the head and prothorax, rather thick and incrassate distally, the subapical joints transverse, the eleventh somewhat longer than the two preceding combined, the second slightly shorter than the third, both shorter than the first; prothorax three-fourths wider than the head, more than one-half wider than long, the sides distinctly converging from base to apex and somewhat strongly, evenly arcuate, the basal angles obtusely rounded, the surface feebly flattened along the middle in basal half; elytra equal in width to the prothorax and only very slightly longer; abdomen at base very nearly as wide as the elytra, almost evenly but just visibly tapering thence to the tip, the border rather thick, the first two tergites distinctly, the third very obsoletely impressed at base. Length 1.9 mm.; width 0.75 mm. New York (near the city)............**ochracea** n. sp.

There is but one specimen before me and this exhibits no sexual marks.

Baryodma Thoms.

Rather slender, parallel, convex, polished, deep black, each elytron with a large rufous spot in apical three-fifths near the suture; legs piceous-black, the antennae black; head longer than wide, with a few fine scattered punctures; antennae moderately incrassate distally, scarcely as long as the head and prothorax, the subapical joints transverse, the second rather longer than the third; prothorax evidently less than twice as wide as the head, subparallel, about one-half wider than long, the apex broad and but little narrower than the base, the sides feebly, evenly arcuate, the surface with a scarcely at all impressed double series of irregularly disposed punctures and some fine punctures sparsely scattered toward the sides; elytra transverse, the sides as long as the sides of the prothorax, the suture three-fourths as long as the

median line, the punctures rather strong and well separated; abdomen subequal in width to the elytra, parallel, finely, not densely punctate, the three basal impressions decreasing slightly in depth, more sparsely and not at all more coarsely punctured than the remainder of the surface. Length 2.7 mm.; width 0.9 mm. South Africa (Cape Town).
bisolata n. sp.

Allied to *nitida* and *verna*, having the same structure of the intermesocoxal parts, but differing from the former in its less transverse prothorax and elytra, and, from *verna*, in its more slender and parallel form; from both it differs in having the sides of the prothorax much less converging from base to apex.

MYRMEDONIINI.

Tinotus Shp.

Tinotus is the Myrmedoniid representative of *Baryodma* and is so similar in facies as to be readily confounded with that genus at first sight. The intermesocoxal parts are broad, the mesosternal process slightly overlapping the metasternum and carinate along the middle as in *Baryodma;* these parts seem to be normally constituted in the following species, which is remarkable in not having a medial excavation on the head or pronotum and in the singular basal impressions of the latter: —

Form moderately stout, convex and shining; antennae toward base and legs more or less pale piceo-rufous; integuments feebly micro-reticulate, minutely, not densely punctate, rather more distinctly and asperately on the elytra, each of the very minute abdominal punctures at the anterior convergence of two long fine straight lines; pubescence sparse and short but extremely coarse, suberect and setiform, pale in color; head unimpressed, as long as wide, the eyes moderate; antennae short, barely as long as the head and prothorax, gradually and rather strongly incrassate distally, the subapical joints distinctly transverse, the second and third subequal; prothorax transverse, three-fourths wider than long, not quite twice as wide as the head, the sides parallel and rounded, becoming strongly convergent at apex, the base broadly arcuate, the surface wholly unimpressed except at the basal margin, where there are two short straight oblique impressions almost equally trisecting the basal margin and diverging anteriorly; elytra equal in width to the prothorax and but little longer; abdomen at base nearly as wide as the elytra, gradually and moderately tapering thence to the tip, with the sides feebly arcuate, the side margins rather thick.

Length 1.5 mm.; width 0.6 mm. Idaho (Coeur d'Alene), — H. F. Wickham.................................... **trisectus** n. sp.

The single type is probably a small specimen, as all the species vary greatly in size individually.

Drusillota n. gen.

This genus is allied to *Drusilla* and *Falagonia*, the structure of the intermesocoxal parts being identical, but differs in having a strong infra-lateral carina, extending from the buccal fissure to and around the base of the head. The Mexican *Falagonia*, of Sharp, is very closely allied to *Drusilla* but has short infra-lateral carinae at base and much smaller postero-lateral extensions of the buccal opening. Of *Drusillota* I have seen only the following type species: —

Form rather stout, moderately convex, highly polished, black throughout the body and antennae, the elytra feebly picescent; legs pale piceo-testaceous; integuments completely devoid of micro-reticulation, the anterior parts strongly and rather sparsely punctured, the abdomen wholly without punctuation, except a few setigerous punctures principally along the apices of the segments; vestiture moderately long, sparse and inconspicuous; head rather longer than wide, the sides obliquely arcuate behind the eyes to the neck, which is three-fourths as wide as the head; eyes moderate, but slightly prominent; punctures broadly wanting along the median line; palpi long, sparsely setose; ligula with two long slender contiguous median processes; antennae almost attaining the tips of the elytra, slender basally, gradually and strongly incrassate distally, finely, sparsely pubescent, also bristling with long setae, the subapical joints distinctly transverse, the eleventh not large, as long as the two preceding combined, second and third elongate, the former somewhat the longer; prothorax slightly wider than the head, about as long as wide, widest at apical third, where the sides are broadly rounded, thence feebly converging and slightly sinuate to the base, the angles obtuse but not rounded, the base arcuate; surface feebly impressed in nearly median third of basal two-thirds; elytra nearly one-half wider than the prothorax but barely as long, the humeri distinctly exposed at base, the sides feebly diverging, the tip broadly emarginate at the suture; abdomen nearly as wide as the elytra, subparallel, the first tergite alone distinctly impressed at base; legs long, slender, the hind tarsi long, with the first joint shorter than the next two combined. Length 4.8 mm.; width 1.0 mm. South Africa (Wellington).. **polita** n. sp.

But one specimen was taken by the author; it is of undetermined sex.

Drusilla Lch.

Moderately stout and convex, feebly, the head and abdomen more strongly, shining, dark red-brown, the head darker, the abdomen black subapically; antennae dark brown, the basal parts and legs testaceous; punctures rather coarse, strong, very dense, obviously separated on the head, sparse on the abdomen, which is very finely punctulate, more closely toward base, very remotely behind the second tergite; vestiture fine, inconspicuous, more distinct on the abdomen; head as long as wide, broadly arcuato-truncate at base, with distinct though obtuse hind angles; eyes moderate, rather prominent; antennae extending to the tips of the elytra, gradually and strongly incrassate distally, the subapical joints slightly transverse, the second much shorter than the third; prothorax nearly as in *canaliculata* but much less narrowed posteriorly, subparallel, with a nearly similar excavation in the male; elytra larger, with less diverging sides, transverse, much wider and shorter than the prothorax; abdomen broader than in *canaliculata*, behind the middle rather wider than the elytra. Length 4.8 mm.; width 1.0 mm. Alaska........................**cavicollis** n. sp.

The single male type represents a species of the *canaliculata* type but with much less rounded base of the head, stouter form and other differences as noted in the description.

Nototaphra Csy.

In his recent general work on myrmecophilous and termitophilous Coleoptera, Dr. Wasmann has redescribed *N. lauta* Csy., under the name *Myrmoecia picta;* he however denies that the fault is his, implying that I was wrong in assigning *lauta* to a genus different from *Myrmoecia*, which he of course overlooked and so fell into a trap and described the species under another name. The species of *Myrmoecia* appear to be rare and it is only recently that, through the kindness of MM. Fauvel and Reitter, I have been able to secure typical specimens. On comparing these with *Nototaphra lauta*, I am convinced that *Nototaphra* is a valid genus, the differences between *Myrmedonia*, as represented by *funesta* Grav, *Myrmoecia confragosa* and *plicata* and *Nototaphra lauta* being expressible as follows: —

Middle coxae narrowly separated, the mesosternal process broadly angulate, the connecting isthmus longer and very narrow; integuments polished,

distinctly punctured; hind tarsi stout, the basal joint not longer than the next two combined; male abdomen with dorsal tuberosities.
Myrmoecia

Middle coxae widely separated, the mesosternal process being very broadly arcuato-truncate at tip; integuments very finely sculptured, sometimes opaque.. 2

2 — Hind tarsi long and very slender, the first joint longer than the next two combined; male without dorsal abdominal tuberosities.
Myrmedonia

Hind tarsi slender but shorter, the basal joint much shorter than the next two combined, the first three decreasing uniformly and rapidly in length; male abdomen with tuberosities nearly as in *Myrmoecia*.
Nototaphra

In general facies the three genera differ very greatly, owing to sculpture, form of the head and prothorax and other features.

Apalonia n. gen.

The very small type of this genus resembles *Myrmedonia* in many respects but differs in its narrower neck, rather small but prominent and somewhat coarsely faceted eyes, impunctate integuments, strongly setose antennae and other characters. The structure of the intermesocoxal parts is much as in *Myrmedonia*, the coxae being almost as widely separated and the sternal structure apparently similar. The tarsi are very slender and filiform, the basal joint of the posterior somewhat longer than the next two combined. The type may be defined as follows: —

Body minute, parallel, strongly convex, highly polished, not at all microreticulate, impunctate, the pubescence fine, rather short and extremely sparse, each tergite with four long strong setae at apex and one on the side margin; color pale rufo-testaceous throughout, the antennae dusky distally and the fourth tergite black; head large, nearly as long as wide, sinuato-truncate at base, the eyes abruptly prominent at the middle of the sides; antennae attaining the tips of the elytra or longer, slender basally, gradually and moderately incrassate distally, sparsely pubescent but bristling with long setae, the subapical joints moderately transverse, the eleventh pointed, slightly longer than the two preceding, the second and third equal in length; prothorax scarcely as wide as the head, but little wider than long, widest and broadly rounded at the sides anteriorly, thence feebly narrowed to the obtuse and slightly rounded basal angles, the base broadly arcuate, the surface strongly and evenly convex, not at all impressed; elytra transverse, slightly wider than the prothorax and not quite as long, the sides evidently diverging from the humeri, which are distinctly exposed at base; abdomen parallel with feebly arcuate sides, at the middle obviously wider than the elytra, the tergites subequal in length throughout, the first rather broadly and feebly impressed at base; sides and apex sparsely bristling with long black setae. Length 1.25 mm.; width 0.42 mm. Florida.................... **seticornis** n. sp.

No sexual marks can be discovered in the unique type. In this genus the coriaceous hind margin of the fifth tergite is excessively fine, all but extinct, in marked contrast to its unusual development in *Chlorotusa*.

Chlorotusa n. gen.

This remarkable genus is evidently allied to *Myrmedonia*, and yet has many structural features extremely like those of *Phanerota*, of the Gyrophaenae. The middle coxae are very widely separated, the mesosternum entering scarcely at all between them and broadly truncate, separated from the very long and broad metasternal projection by a short and apparently wholly unimpressed isthmus. The legs are very long and slender, the tarsi long and filiform, with the basal joint of the anterior and middle much shorter, that of the posterior longer, than the second. The eyes are very large, prominent and coarsely faceted. The neck is less than half as wide as the head. Other characters may be drawn from the following description of the unique type: —

Stout, fusiform, rather convex, highly polished, without trace of microreticulation, the punctures extremely minute and sparse, asperate on the elytra, wholly wanting on the abdomen, which has some setigerous punctures along the apices of the tergites, these punctures becoming strongly asperate posteriorly; pubescence sparse, inconspicuous; color pale rufo-testaceous throughout the body, legs and antennae, the head deep black, arcuato-truncate at base, wider than long, with the eyes very large and convex, occupying virtually the entire sides and separated by twice their own width, the facets very coarse, convex, the tempora extremely short; antennae very long, extending well behind the elytra, gradually and moderately incrassate distally, setose, the subapical joints longer than wide, the eleventh abruptly and obtusely pointed, much shorter than the two preceding combined, second and third equal in length, much shorter than the first; prothorax equal in width to the head, not quite a third wider than long, widest near the apex, the sides thence distinctly converging and nearly straight to the obtuse and somewhat rounded basal angles, the base broadly rounded, margined, the surface convex, even, not at all impressed; elytra large with strongly diverging sides, four-fifths wider than the prothorax and about a third longer, transverse, the humeri broadly exposed, the suture not impressed, the inner apical angles rounded; abdomen broad with arcuate sides, at about basal third as wide as the elytra, narrower at base and strongly narrowed toward the tip, the border thin, inclined and very deep, the first tergite alone impressed at base, the others flat; flanks bristling with long black setae. Length 3.0 mm.; width 0.95 mm. Texas..**megalops** n. sp.

The single male before me has a longitudinal carina on the fifth tergite, gradually disappearing anteriorly and not quite attaining the tip, the sixth broadly rounded. The singular coriaceous fringe at the apex of the fifth tergite, characterizing all the Staphylinidae, is especially developed here. There is never a trace of this form of apical margin on the first four tergites or on the sixth, and its anatomical significance is wholly unknown to me.

Xesturida n. gen.

This genus is allied to *Trichiusa*, having the middle coxae fully as widely separated, but differs in its more finely faceted eyes, broader metasternal parapleurae, longer and more slender tarsi, with more elongate basal joint of the posterior, this being equal to the next two combined, in its subglabrous integuments and wholly impunctate abdomen. The neck is broad, the antennae more slender than in *Trichiusa*, and the basal impression of the third tergite, distinct in *Trichiusa*, is obsolete or very nearly so. The single species may be described as follows:—

Form rather stout, the anterior parts narrow, rather convex, highly polished, not at all reticulate, very minutely, evenly but sparsely and asperulately punctulate, except the abdomen, which is wholly without trace of any form of sculpture, the four apical setae of each tergite small and inconspicuous; color pale piceo-testaceous, the abdomen slightly and indefinitely clouded posteriorly except at tip, the antennae dusky except basally; pubescence sparse and pale, rather inconspicuous; head wider than long, parallel, abruptly and feebly constricted at base, the eyes rather large, moderately prominent; antennae attaining the middle of the elytra, the first six joints equally thick, the second and third elongate and subequal, the next three subequal and as long as wide, seven to

the tip rapidly incrassate, the subapical joints transverse, the eleventh as long as the preceding three combined, the bristling setae throughout distinct; prothorax a fourth wider than the head and a third wider than long, parallel and feebly arcuate at the sides, slightly and arcuately narrowed at the apex, the basal angles rounded, the surface convex, wholly unimpressed; elytra transverse, three-fifths wider but only slightly longer than the prothorax, the humeri distinctly exposed at base; abdomen broad, fully as wide as the elytra, the sides arcuate, narrowed rather conspicuously toward tip; legs slender, moderately long. Length 1.65 mm.; width 0.68 mm. Mississippi (Vicksburg).
laevis n. sp.

The type is probably a female, or at least there are no evident male sexual characters visible externally.

Trichiusa Csy.

A considerable number of new forms have recently come to light and the known species may be provisionally classified as follows:—

Elytra compositely sculptured, having coarser nude punctures intermingled with smaller asperulate punctules bearing the conspicuous pubescence, the interstices polished, not or only very feebly and coarsely reticulate; antennae very stout distally, the second and third joints elongate and frequently subequal 2

Elytra with a single set of minute and obsoletely asperulate punctures bearing the pubescence, the interstices less shining and distinctly micro-reticulute; species smaller in size; basal angles of the prothorax always somewhat obtuse and rounded, never prominent...................... 6

2 — Hind angles of the prothorax distinct, usually somewhat prominent and not at all rounded; body larger and stout.......................... 3

Hind angles obtuse and very narrowly rounded; nude punctures of the elytra smaller and but little larger than the pubiferous punctures; body less stout... 5

3 — Elytra black and concolorous with the head and prothorax. Body stout, polished, minutely and feebly micro-reticulate, except the elytra, which are non-reticulate and with the coarse punctures sparse; pubiferous punctures throughout minute and sparse, the pubescence long, shaggy and erect but not very close; legs pale; head wider than long, scarcely impressed, the eyes small, prominent; antennae very stout distally, sparsely pubescent and with long bristling setae, extending to the middle of the elytra, dusky but gradually rufous in basal half, the subapical joints moderately transverse, the eleventh obtusely pointed, longer than the two preceding combined, the second and third elongate, the former very slightly the longer; prothorax much wider than the head, fully one-half wider than long, widest near apical third, where the sides are broadly and feebly rounded, thence very slightly converging to the basal angles, which are not rounded but not prominent; sur-

face narrowly impressed along the median line behind the middle almost to the base, the fine sparse punctures more distinct near the base; elytra transverse, a third wider and slightly longer than the prothorax, the humeri well exposed at base, the sides subparallel, feebly arcuate. Length 1.8 mm.; width 0.78 mm. District of Columbia. **polita** n. sp.

Elytra always pale, castaneous or reddish-brown........................4

4 — Form stout, parallel, convex, compact, shining, pale castaneous, the head and a subapical cloud on the abdomen black; legs pale, the antennae dusky rufous, paler basally; pubiferous punctures fine but evident throughout, rather close, the larger elytral punctures more numerous than in *polita* but less distinct; pubescence moderately long, erect and abundant; head well developed, wider than long, parallel, the eyes well developed; antennae very thick, gradually incrassate to the tip, extending nearly to the middle of the elytra, the third joint constricted at base, but slightly elongate and much shorter than the second, the subapical joints strongly transverse; the eleventh obtuse and not quite as long as the preceding two; prothorax strongly transverse, a third wider than the head, fully two-thirds wider than long, widest at apical third, the sides thence strongly convergent and becoming feebly sinuate to the rather prominent basal angles, the surface feebly, indefinably and subtransversely impressed before the middle of the base; elytra barely a fifth wider but fully a third longer than the prothorax, subparallel, the humeri evidently exposed at base; abdomen parallel with arcuate sides, as wide as the elytra, the three basal impressions distinct and subequal as usual, the punctures fine but evident, not very close-set, the surface polished. Length 1.9 mm.; width 0.75 mm. Ohio (Cincinnati),— Chas. Dury................................**transversa** n. sp.

Form and coloration nearly as in the preceding, the size larger, the prothorax more blackish and less transverse, the head and antennae nearly similar, the tenth joint of the latter more evidently longer than the ninth; elytra less transverse but proportioned and punctured nearly as in *transversa*. Length 2.1 mm.; width 0.78 mm. District of Columbia..**compacta** Csy.

Form stout, rather convex, polished, not micro-reticulate at any point, pale rufo-castaneous, the head black, the abdomen darker, with a large and very indefinite subapical black cloud; legs pale, the antennae black, testaceous toward base and at tip; pubiferous punctures minute and moderately close-set, intermingled with coarse nude punctures on the head, along the entire base of the pronotum and throughout the elytra; pubescence pale, shaggy and conspicuous; head small, nearly as long as wide, arcuately narrowed behind the small and prominent anterior eyes, the vertex with a small impression; antennae extending nearly to the middle of the elytra, gradually becoming very stout distally, the second and third joints both elongate, the latter not constricted at base and but slightly shorter than the second, the subapical joints strongly transverse, the tenth not noticeably longer than the ninth, the eleventh pale, large, obtusely pointed and nearly as long as the preceding three combined; prothorax nearly one-half wider than the head and about two-fifths wider than long, subparallel and broadly rounded at the sides, slightly narrowed toward base, the angles minutely subprominent, the surface not impressed at any point; elytra a third wider and longer than the prothorax, subparallel, the humeri well exposed at base; abdomen parallel with feebly arcuate sides, at the middle slightly wider than the elytra, the punctures distinct and moderately close-set. Length 1.9 mm.; width 0.8 mm. Ohio (Cincinnati), — Chas. Dury. **parviceps** n. sp.

5 — Body black, shining, the antennae black, pale basally, the legs pale; integuments feebly micro-reticulate throughout except the elytra; pubiferous punctures fine and normal anteriorly but more asperate and stronger than usual on the elytra and abdomen, the nude punctures on the former very few in number and indistinct; antennae gradually but much less strongly incrassate than in the four preceding species, the second and third joints elongate and subequal in length, the eleventh small, slightly pointed and barely as long as the two preceding combined; prothorax moderately transverse, very feebly and narrowly impressed along the median line behind the middle; elytra wider and longer than the prothorax, the humeri but slightly exposed at base; abdomen obviously wider than the elytra. Length 1.65 mm.; width 0.66 mm. New Jersey.................................**setigera** Csy.

6 — Antennae short, gradually and more or less strongly incrassate distally, the second joint very much longer than the third, which is constricted at base and but slightly elongate.................................... 7

Antennae longer and more slender, but feebly incrassate distally, the third joint elongate, more evenly obconical and but slightly shorter than the second...15

7 — Prothorax at most only very slightly narrower than the base of the elytra, the elytral humeri not noticeably or but very slightly exposed at base.. 8

Prothorax very distinctly narrower than any part of the elytra, the humeri generally well exposed at base.................................... 9

8 — Moderately stout and convex, shining, black throughout, the last five antennal joints black, the basal part gradually paler, the legs pale; punctures fine, not close-set, the pubescence only moderately long and rather sparse; integuments finely, not very strongly micro-reticulate, more coarsely on the elytra; head small, nearly as long as wide, parallel, abruptly and obliquely constricted at base, the vertex impressed in the middle; antennae but little longer than the head and prothorax, strongly incrassate distally, the third joint very strongly constricted or pedunculate at base; prothorax nearly one-half wider than the head and two-thirds wider than long, the sides subparallel, arcuately narrowed near the apex only, the surface feebly, transversely impressed before the middle of the base; elytra about a fourth wider and fully a third longer than the prothorax, the sides feebly arcuate, the humeri very narrowly exposed at base; abdomen parallel, equal in width to the elytra, shining, not conspicuously punctate. Length 1.6 mm.; width 0.61 mm. Idaho (Coeur d'Alene), — H. F. Wickham. **monticola** n. sp.

Moderately stout and convex, shining, piceous, the prothorax paler, rufous, the head and abdomen blackish, the latter testaceous toward base; antennae infuscate distally, the legs pale; surface finely, feebly micro-reticulate, the punctures not close-set, invisible except on the elytra and abdomen, where they are asperulate; pubescence not very long or close, pale; head with a deep rounded impression at the middle of the vertex, somewhat narrowed behind the small subprominent eyes; antennae nearly as in *monticola*, the third joint strongly constricted and pedunculate at base; prothorax two-fifths wider than the head and two-fifths wider than long, the sides distinctly converging and broadly arcuate from base to apex; base strongly arcuate, the surface transversely impressed before the middle of the base, the impression punctate; elytra slightly wider and a third longer than the prothorax, the sides evidently diverging from the humeri, which are scarcely at all exposed at base; abdomen barely as wide as the elytra, parallel, slightly constricted at base. Length 1.6 mm.; width 0.6 mm. Texas (Galveston)...................................**convergens** n. sp.

9 — Form very stout, convex, hirsute, the antennae unusually stout. Shining, black, the elytra castaneous; antennae black, rufescent toward base, the legs pale; micro-reticulation almost obsolete throughout; punctures fine, numerous, more visible on the elytra and abdomen; pubescence long, abundant, erect and very conspicuous; head well developed, with an isolated rounded median impression on the vertex, the sides converging behind the eyes; antennae evidently longer than the head and prothorax, very stout, incrassate, the last joint very short, obtusely pointed, much shorter than the two preceding combined, the third strongly obconical and narrowed at base but not abruptly constricted; prothorax about two-fifths wider than long and a third wider than the head, parallel and nearly straight at the sides, abruptly and arcuately narrowed only very near the apex, the basal angles more distinct than usual in this section, the surface with two small punctate impressions before the middle of the base arranged transversely; elytra two-fifths wider and longer than the prothorax, the humeri rather widely exposed at base; abdomen not quite as wide as the elytra, narrowed posteriorly only near the tip. Length 1.7 mm.; width 0.68 mm. Virginia (Fort Monroe)................**hirsuta** n. sp.

Form less obese and less hirsute, the antennae only moderately stout....10

10 — Sides of the head evidently converging from the eyes to the basal angles. Moderately shining, black, the elytra and basal parts of the abdomen slightly piceous; pubescence erect, rather abundant and distinct; head small, the vertex impressed, the impression extending narrowly along the median line to the base of the occiput; antennae pale, infuscate near the apex; prothorax rather large, transverse, the sides feebly converging and rather strongly arcuate from base to apex, the surface finely, not distinctly impressed transversely before the scutellum; elytra with the humeri less exposed at base than in others of this section, distinctly wider and longer than the prothorax; abdomen as wide as the elytra. Length 1.4–1.45 mm.; width 0.5–0.58 mm. Rhode Island (Boston Neck)...................................**pilosa** Csy.

Sides of the head parallel or subparallel behind the eyes................11

11 — Body deep black throughout, the legs pale, the antennae fusco-testaceous, gradually blackish distally. Micro-reticulation feeble, the surface

rather strongly shining, the punctures minute and rather sparse, more distinct and closer on the elytra; pubescence erect but rather sparse and not conspicuous; head strongly impressed at the middle of the vertex, the median line posteriorly finely, distinctly impressed to the base; eyes only moderately convex; antennae as usual slightly longer than the head and prothorax, the latter two-fifths wider than the head, short, fully one-half wider than long, the sides nearly parallel and subevenly, distinctly arcuate throughout, the surface finely, feebly, transversely impressed before the middle of the base, the impression more distinct at its extremities; elytra fully two-fifths wider and longer than the prothorax, the humeri broadly exposed at base; abdomen parallel, as wide as the elytra, with the sides slightly arcuate, strongly shining. Length 1.5 mm.; width 0.56 mm. Kansas (McPherson), — W. Knaus.

atra n. sp.

Body deep black, except the apex of the abdomen, which is rufo-testaceous, the elytra and basal part of the abdomen perhaps just visibly picescent; legs and antennae pale, the latter infuscate distally. Reticulation very fine and rather feeble, the surface distinctly shining; pubescence erect but rather sparse and not conspicuous, the punctures very minute, not obvious even on the elytra; head with a large elongate impression on the vertex which is continued narrowly and feebly to the base of the occiput; eyes distinctly prominent; antennae extending to basal third of the elytra; prothorax barely a third wider than the head, about two-fifths wider than long, the sides parallel and nearly straight in basal half, becoming strongly arcuate and converging in about apical half to the apex, the surface distinctly impressed transversely before the middle of the base; elytra rather more than a third wider and longer than the prothorax, the humeri distinctly exposed at base; abdomen about as wide as the elytra. Length 1.35 mm.; width 0.45 mm. Canada (Ottawa), — W. H. Harrington......................**postica** n. sp.

Body varicolored, never in great part deep black........................12

12 — Pronotal punctures fine and normally close-set but strongly asperulate and distinct, the interspaces smooth, alutaceous and extremely minutely and obscurely sculptured, not distinctly micro-reticulate. Form rather slender, convex, alutaceous, the prothorax piceo-rufous, the head, elytra and abdomen, except toward base, black, the legs and antennae pale, the latter black distally; pubescence rather short, stiff and inclined, not conspicuous; head with a small deep rounded impression at the middle of the vertex, the eyes distinctly prominent; antennae scarcely longer than the head and prothorax, very moderately incrassate distally; prothorax two-fifths wider than the head and two-fifths wider than long, the sides evenly arcuate, converging apically, subparallel basally, the surface rather strongly, transversely impressed near the base at the middle; elytra about a fourth wider and a third longer than the prothorax, the humeri evidently but not broadly exposed at base, narrowly so for the present section, the sides slightly diverging; abdomen parallel with feebly arcuate sides, as wide as the elytra, feebly narrowed toward tip. Length 1.6 mm.; width 0.5 mm. Virginia (Fort Monroe)..............................**virginica** n. sp.

Pronotal punctures very fine and indistinct, not strongly asperulate, the interspaces with the usual fine but evident regular micro-reticulation..13

13 — Prothorax large, the sides parallel, arcuate, becoming strongly convergent anteriorly only near the apex. Body stout, convex, rather shining, piceous-black, the pronotum and basal parts of the abdomen slightly but not very distinctly paler; head with a small deep impression continued to the base by a fine feeble impressed line; prothorax fully three-fifths wider than long, distinctly, transversely impressed near the base; elytra much wider and longer than the prothorax, the humeri distinctly exposed at base; abdomen rather wider than the elytra. Length 1.45 mm.; width 0.58 mm. Iowa (Cedar Rapids).
robustula Csy.

Prothorax notably small in size, the sides evidently converging from base to apex, more arcuately and strongly so toward the latter..............14

14 — Form rather slender, moderately convex, strongly shining, piceous-black, the prothorax very slightly paler, blackish-piceous to pale rufous; basal parts of the abdomen dark to pale rufous; legs pale, the antennae black, testaceous toward base; pubescence not very long, reclined or partially erect, longer and erect on the abdomen posteriorly; punctures extremely fine throughout; head with the usual rounded vertexal impression, narrowly continued to the base by a subobsolete impressed line, the eyes small, anterior and rather prominent; antennae slender, strongly incrassate distally, attaining basal third of the elytra; prothorax about a third wider than the head and one-half wider than long, with a short transverse impression before the middle of the base; elytra at tip nearly one-half wider than the prothorax, almost one-half longer, the sides distinctly diverging from the humeri, which are well exposed basally, the suture impressed for some distance behind the scutellum; abdomen parallel with nearly straight sides, not quite as wide as the elytra in the male, fully as wide as the latter in the female. Length 1.6 mm.; width 0.5 mm. Mississippi (Vicksburg) and Texas (Galveston)..**rigida** n. sp.

Form slightly stouter, moderately convex and shining; coloration throughout nearly as in *rigida*, the pubescence rather longer, paler and more distinct; punctuation very fine throughout as usual; head with the usual small deep rounded impression at the middle of the vertex, continued to the base by a rather distinctly impressed median line; eyes very prominent, rather small in size; antennae slightly longer than the head and prothorax, nearly as in *rigida* and many other species; prothorax small, the sides strongly converging anteriorly from the narrowly rounded basal angles, nearly as in *rigida* throughout; elytra rather larger, the sides less diverging from the humeri, which are distinctly and broadly exposed at base, the suture only obsoletely and very narrowly impressed behind the scutellum, three-fifths wider and fully one-half longer than the prothorax; abdomen parallel with feebly arcuate sides, almost as wide as the elytra. Length 1.75 mm.; width 0.6 mm. Idaho (Coeur d'Alene), — H. F. Wickham...............**discreta** n. sp.

Form rather stouter, smaller in size, normally convex, subalutaceous, piceous, the head and abdomen blackish, the prothorax and basal parts of the abdomen testaceous; legs and antennae pale flavo-testaceous, the latter somewhat infuscate distally; pubescence rather long, suberect, pale and distinct; punctuation very fine; head strongly impressed along the middle in apical half, more deeply toward the middle of the vertex, also impressed at the middle of the occiput; eyes rather well developed, not very prominent; antennae evidently longer than the head and prothorax, strongly incrassate distally; prothorax nearly one-half wider than the head and two-fifths wider than long, the sides at first only feebly though evidently convergent anteriorly from the base, more abruptly and strongly arcuate and converging anteriorly than in the two preceding species, the transverse subbasal impression distinct; elytra transverse, two-fifths wider but only about a third longer than the prothorax, the sides strongly diverging from the humeri, which are moderately exposed at base; abdomen scarcely as wide as the elytra. Length 1.35 mm.; width 0.57 mm. Virginia (Fort Monroe). **varicolor** n. sp.

15—Body rather stout, convex, shining, very obsoletely but regularly micro-reticulate, pale rufo-testaceous in color, the fourth tergite black toward the middle, the legs and antennae pale, the latter slender, but feebly incrassate distally and fully attaining the middle of the elytra; pubescence long, erect, rather abundant and conspicuous; head impressed at the middle of the vertex as usual and feebly along the median line thence to the base, the eyes prominent; prothorax moderately transverse, about a fourth wider than the head, the surface with a very feeble, somewhat rounded impression before the middle of the base; elytra much wider and longer than the prothorax, the humeri widely exposed at base, the suture feebly impressed behind the scutellum; abdomen broad as usual. Length 1.68 mm.; width 0.65 mm. Delaware.................**parvicollis** Csy.

Trichiusa appears to be a genus peculiar to the nearctic regions, excepting the true Pacific coast fauna, and differs greatly in general facies from any of the European types as far as known to me; it is evidently very rich in species and probably less than half have been discovered as yet. *Rigida*, of the above table, occurs in typical form at Vicksburg and the Galveston specimens are somewhat heterogeneous, some having the normally blackish-piceous prothorax, while others have this part bright testaceous; these differences may be sexual, at least in some degree. There is a good deal of structural diversity in the genus.

The following genera are based upon some of our more conspicuous Athetoid species and are compared with European species identified for me by Mr. Reitter under the names *Liogluta vicina* Steph., *L. nitidula* Kr., *L. subplana* J. Sahl., *L. sexnotata* Thoms., *Atheta* (*Homalota* Rey) *castanoptera* Mann., *Atheta trinotata* Kr., and *A. crassicornis* Fab. These seven species form five genera or subgenera, the first three species having a rather broad, arcuately truncate to triangular mesosternal process, very short and basal infra-lateral carinae of the head and long and slender, barely incrassated antennae, the first four joints of the hind tarsi being rather short and subequal among themselves; they are the true *Liogluta* Thoms. The above assumed *L. sexnotata*, however, differs in having the mesosternal process acutely aciculate, the antennae much longer and gradually and conspicuously incrassate and the elytra much shorter and more transverse when compared with the prothorax, constituting the second genus. *Atheta castanoptera* resembles *sexnotata* in the acutely aciculate mesosternum, but has the infra-lateral carinae much longer, almost attaining the buccal cavity, the antennae and elytra being proportioned as in *Liogluta*. Assuming *Atheta trinotata* as the type of *Atheta*, this genus is distinguished by an acutely aciculate and longer mesosternal process, basal and rudimentary infra-lateral carinae, with the prothorax and elytra proportioned as in *Liogluta* but having the antennae notably short, the subapical joints transverse. Finally *Atheta crassicornis* constitutes a genus having characters nearly similar to *Atheta*, but with the infra-lateral carinae entire and the antennae more developed. The basal joint of the hind tarsi is decidedly shorter than the second in all these five genera, excepting the true *Liogluta*. The subject is a difficult one and is only touched upon at the present time for the reason that I have already published *Anepsiota* (Ann. N. Y. Acad., VII, p. 329), and desire to fix its position in the series more definitely. The generic or subgeneric groups defined below are all allies of *Liogluta* and *Homalota* Rey, (nec Mann., fide Heyden, Reitter and Weise) and not of *Atheta*:—

Infra-lateral carinae of the head abbreviated, not attaining the buccal opening..2
Infra-lateral carinae entire..12
2 — Hind tarsi short..3
Hind tarsi long, sometimes nearly as long as the tibiae, with the two basal joints relatively much more elongate and equal or subequal in length..11
— First two joints of the hind tarsi equal in length; abdominal impressions more or less narrow..4

First joint distinctly shorter than the second; impressions as in the preceding group..9

First joint longer than the second; abdomenal impressions very broadly concave 10

4 — Mesosternal process more or less broad, frequently obtusely arcuato-truncate at apex 5

Mesosternal process very acute at tip 6

5 — Infra-lateral carinae extending less than half way to the buccal opening; antennae rather thin, the last joint of moderate length, about as long as the preceding two combined. Europe. Type *L. vicina* Steph. **Liogluta**

Infra-lateral carinae extending almost to the buccal opening, fine; antennae thick, the last joint unusually elongate, as long as the preceding three combined or nearly so. Nearctic Atlantic regions. Type *M. alutacea* Csy. (n. sp.) ....**Macroterma**

6 — Infra-lateral carinae long, extending more than half way to the buccal opening. Nearctic Pacific coast fauna.............................. 7

Infra-lateral carinae extremely short, basal; prothorax small, narrowed toward base. Nearctic Atlantic fauna............................... 8

7 — Abdomen with four segments impressed at base; elytra granose; antennae long, loose, rather slender, the apical joint normal; prothorax narrower than the elytra. Type *Homalota granulata* Mann....**Elytrusa**

Abdomen with but three segments impressed at base; elytra not granose; antennae long but thicker, more incrassate and more compact, the last joint pointed at tip and about as long as the two preceding combined; prothorax large. Type *Oxypoda insignis* Csy.................**Athetota**

8 — Abdomen with three segments deeply and subequally impressed at base; integuments densely micro-reticulate and dull; pubescence rather short, subdecumbent; antennae less than half as long as the body. Type *T. brunneipes* Csy. (n. sp.).......................................**Terasota**

Abdomen with four segments deeply impressed at base; integuments wholly devoid of micro-reticulation and highly polished; pubescence long, suberect and bristling; antennae more than half as long as the body, very slender. Type *E. lucida* Csy. (n. sp.)..................**Euromota**

9 — Infra-lateral carinae extending almost to the buccal opening; hind tarsi shorter; antennae nearly as in *Liogluta*. Europe. Type *Homalota castanoptera* Mann...**Homalota**

Infra-lateral carinae very short, basal; hind tarsi noticeably less abbreviated; antennae longer, thicker and more incrassate; eyes less developed. Europe. Type *Liogluta sexnotata* Thoms., as identified by Reitter in a specimen collected in the Caucasus....................... ————

10 — Infra-lateral carinae very short, obsolescent and basal; prothorax small, with the sides converging toward base; integuments densely micro-reticulate; pubescence short, subdecumbent; antennae nearly as in *Liogluta;* first three abdominal segments broadly and strongly impressed, the fourth narrowly and less strongly though distinctly. Nearctic Atlantic regions. Type *T. ventralis* Csy. (n. sp.)...**Taphrodota**

11 — Eyes small, the antennae long, thick, infra-lateral carinae very short, wholly basal; body thick, the prothorax large; first three tergites nar-

rowly and very moderately impressed at base. Nearctic Pacific coast. Type *A. quadricollis* Csy. .... **Anepsiota**

12 — Middle coxae contiguous; mesosternal process very short but acute, the metasternum broadly obtuse, not entering the intercoxal space, the longitudinal discontinuity longer than in any allied genus; hind tarsi only moderately short, the first two joints as in *Liogluta;* antennae nearly as in that genus but more elongate; prothorax moderately large, generally parallel; elytra well developed; impressions of the first two tergites large and deeply concave, that of the third much narrower and feeble. Nearctic western mountain regions. Type *H. helenica* Csy. (n. sp.) .... **Homalotusa**

The *Homalota* of this table is given in the sense understood by Rey. There is some reason to believe that the almost uniformly colored and dark testaceous species identified above as *Liogluta sexnotata* Thoms., is wrongly determined and I therefore hesitate to found a genus upon it, simply indicating its salient characters in the table.

Macroterma n. gen.

Of this genus there are at least two species now known; they may be described as follows: —

Form stout, subparallel, moderately convex, alutaceous, distinctly and evenly micro-reticulate throughout except the abdomen, which is more finely and feebly strigilate in broken transverse lines; punctures everywhere extremely fine, not dense, sparse on the abdomen; pubescence short, decumbent and inconspicuous, pale; color black, the prothorax slightly piceous, the elytra pale brownish-flavate; legs pale, the antennae blackish throughout; head as long as wide, arcuately narrowed behind the large and moderately prominent eyes; antennae attaining the middle of the elytra, stout, the three basal joints elongate, the second shorter than the third, four to ten distinctly transverse, the eleventh gradually pointed, as long as the preceding three combined; prothorax nearly a third wider than the head, a fourth wider than long, parallel and broadly, evenly arcuate at the sides, arcuate at base, the angles obtuse; surface not at all impressed at any point; elytra fully two-fifths wider and a third longer than the prothorax, the sides evidently diverging from the humeri, which are distinctly exposed at base; abdomen parallel, narrowed slightly at tip, narrower than the elytra; tibiae and tarsi slender, moderately long. Length 3.5 mm.; width 0.9 mm. New York (Ithaca), — H. H. Smith...................... **alutacea** n. sp.

Form nearly similar, feebly, minutely and sparsely punctate, more shining, the micro-reticulation and abdominal strigilation very feeble, black, the elytra and legs pale brownish-testaceous, the antennae blackish throughout; pubescence rather longer but sparser and inconspicuous;

head somewhat more developed, rather longer than wide, the sides parallel and nearly straight behind the eyes, which are smaller and less prominent; nuchal constriction feeble but more abrupt than in *alutacea*, the neck notably broader; antennae nearly similar but more slender toward base, the second joint about equal to the third, the fourth smaller, as long as wide, five to ten transverse, the eleventh not quite as long as the three preceding combined, acutely pointed; prothorax about a third wider than the head and a third wider than long, the sides parallel, evenly arcuate, more strongly so than in *alutacea*, the surface with a very fine and feeble impressed median line except toward tip and a very fine, short and faint transverse line before the base; elytra nearly as in *alutacea* but less transverse, the abdomen much narrower than the elytra, parallel, broader at tip than in *alutacea* but having similarly three narrow and subequal basal impressions. Length 3.2 mm.; width 0.85 mm. New Hampshire (White Mts.). **borealis** n. sp.

I can identify neither of these rather conspicuous species with any previously described by Erichson or Say.

Elytrusa (n. gen.), of the above table, is founded upon a species described by Mannerheim, from Unalaska Island, under the name *Homalota granulata*. I have before me a species collected by Mr. Wickham at Fort Wrangel, Alaska, which satisfies the abbreviated original diagnosis very well but is larger; there may therefore be several species of *Elytrusa*. The singular granulation of the elytra is produced by strong asperities attending the fine punctuation.

Athetota n. gen.

Besides *Oxypoda insignis* Csy., afterwards referred to *Anepsiota* and *Anepsiota wickhami* Csy., (Annals N. Y. Acad., VII, p. 331), this genus will include the following species: —

Moderately stout, parallel, convex, shining, very obsoletely micro-reticulate, the elytra rather more distinctly, the abdomen very faintly so and toward apex only; head and abdomen black, the prothorax rufo-piceous, the elytra paler, brownish; legs paler, testaceous; punctures very fine, sparse, somewhat areolate, closer on the elytra; pubescence short, decumbent, pale and rather distinct, erect but very sparse on the abdomen; head rather longer than wide, the sides feebly swollen behind the eyes, parallel, rounding feebly to the base; eyes moderately large, not prominent; antennae extending almost to the tips of the elytra, slender basally, gradually and strongly incrassate distally, the second and third joints subequal, outer joints almost as long as wide, obtrapezoidal, the eleventh pointed, as long as the two preceding combined; prothorax two-fifths wider than the head and a third wider than long, parallel, the sides evenly and distinctly arcuate, the base rounded; angles obtuse, the surface even, except a short, extremely fine and feeble impression along the median line very near the base; elytra only very slightly wider than the prothorax, nearly a third longer, subparallel; abdomen parallel, subequal in width to the elytra. Length 2.8 mm.; width 0.8 mm. Vancouver Island (Victoria), — H. F. Wickham.................................**atriventris** n. sp.

This species differs from *wickhami* in its smaller size, and, from both that and *insignis*, in its relatively more incrassate antennae distally; the elytra resemble those of *insignis* and are relatively less transverse than in *wickhami*.

Terasota n. gen.

The unique type of this genus differs conspicuously in general appearance from *Macroterma* and *Athetota* in its more slender form and small prothorax; it may be described as follows: —

Moderately stout and convex, alutaceous, distinctly micro-reticulate, more obsoletely and coarsely on the abdomen, which is more shining; punctures very fine, indistinct, not very dense, more distinct on the abdomen though sparser apically; pubescence fine, short, inconspicuous; color blackish-piceous, the elytra scarcely at all paler, the abdomen slightly rufescent except toward tip; legs pale brown, the antennae blackish, the first joint piceous; head slightly elongate, the sides arcuately and feebly converging behind the notably large and rather prominent eyes, the neck three-fourths as wide; antennae extending nearly to the middle of the elytra, slender, gradually and moderately incrassate distally, the elongate second and third joints equal, the fourth and fifth elongate, fifth to tenth as long as wide to slightly transverse, the eleventh scarcely as long as the two preceding combined, pointed; prothorax only just visibly wider than the head, a fifth wider than long, widest anteriorly, where the sides are broadly rounded, thence feebly converging and straighter to the base, the angles obtuse but not distinctly rounded; surface feebly impressed along the median line from before the middle nearly to the base; elytra large, one-half wider and longer than the prothorax, the sides feebly diverging from the humeri, which are well exposed at base; abdomen but little narrower than the elytra, parallel, with rather arcuate sides, the three basal impressions strong, somewhat broad and equal. Length 3.25 mm.; width 0.78 mm. New York (Ithaca), —H. H. Smith.............................**brunneipes** n. sp.

No characters indicating sex are observable; the sixth tergite is narrowly subtruncate at tip in the type.

Euromota n. gen.

This genus is also represented by a single species, very distinct in facies; it may be briefly described as follows:—

Form moderately stout, rather strongly convex, highly polished, wholly devoid of minute sculpture, very finely and sparsely punctate throughout anteriorly, still more sparsely on the abdomen, the pubescence rather long, erect and sparse but pale and distinct, less obvious on the abdomen; color dark rufo-piceous, the abdomen black or blackish; legs pale testaceous, the antennae fuscous, paler basally; head rather longer than wide, the sides behind the somewhat small but very prominent eyes subparallel and feebly arcuate, thence moderately rounding and converging to the neck, which is four-fifths as wide; antennae very slender, moderately incrassate distally, extending fully to the tips of the elytra, the second and third joints elongate, subequal but shorter than the first, four to nine longer than wide, tenth as long as wide, the eleventh not quite as long as the two preceding combined, pointed; prothorax slightly though obviously wider than the head, only very slightly wider than long, widest near apical third, where the sides are broadly arcuate, thence distinctly converging and straight to the obtuse and well rounded basal angles, the base rather feebly arcuate, the surface narrowly and very feebly impressed along the median line from the middle nearly to the base; elytra two-fifths wider and a third longer than the prothorax, subparallel, broadly impressed on the suture behind the scutellum, the humeri well exposed at base; abdomen parallel, distinctly narrower than the elytra, the tergites convex behind the impressions; legs rather long and slender, the tarsi short. Length 2.6–3.3 mm.; width 0.68–0.8 mm. Virginia (Fort Monroe) and New Jersey ....**lucida** n. sp.

No positive indications of sexual identity are discernible among the five specimens at hand. The genus *Euromota* may possibly have some affinity with *Gnypeta*, but is well distinguished by the short basal joints of the hind tarsi.

Taphrodota n. gen.

The type and only known species of this genus may be described as follows:—

Body rather stout, moderately convex, dull in lustre, strongly micro-reticulate throughout, the reticulae of the abdomen larger and more transverse in form; punctures very fine, indistinct except on the elytra, where they are dense, sparser on the abdomen, which is shining; pubescence short, decumbent, inconspicuous; color blackish-piceous, the abdomen black throughout, the legs pale brown; antennae blackish, paler toward base, slender, feebly incrassate distally, attaining the middle of the elytra, the elongate second and third joints equal, fourth and fifth elongate, sixth to tenth from as long as wide to very nearly so, the eleventh sharply pointed, as long as the two preceding joints combined; head as long as wide, convex, briefly and linearly impressed at the middle of the vertex; sides arcuately converging behind the moderately large and somewhat prominent eyes to the neck, which is barely two-thirds as wide as the head; prothorax a fourth wider than the head and a fifth wider than long, widest before the middle, the sides broadly arcuate, more converging near the apex, feebly converging and straight toward base, the angles obtuse but scarcely rounded, the surface broadly concave in median third from near the apex to just before the basal margin; elytra three-fifths wider and one-half longer than the prothorax, subparallel, the humeri broadly exposed at base, the angle rounded; abdomen not quite as wide as the elytra, parallel, narrowed near the tip; legs short, moderately slender. Length 3.8 mm.; width 0.93 mm. New York (Ithaca),— H. H. Smith........................**ventralis** n. sp.

In the male the fifth tergite has a very stout and obtusely rounded medial ridge, almost throughout the length, more elevated posteriorly, where it is slightly excavated at each side of the summit, the apical margin of the fourth tergite having a feeble median sinuation; sixth plate feebly sinuate throughout the width and with four small tuberculiform swellings of the edge bounding the sinus.

Anepsiota Csy.

Besides *quadricollis*, the type of the genus, *Anepsiota* may receive provisionally the following species, agreeing in general facies but departing materially in antennal structure and in its shorter tarsi, although the two basal joints of the posterior are each unusually elongated: —

Form more slender than in *quadricollis*, rather convex, pale and uniform rufo-testaceous throughout the body, legs and antennae, somewhat shining though feebly micro-reticulate throughout, the punctures very fine, not distinct, more evident but not dense on the elytra, sparse on the abdomen; pubescence pale but subdecumbent and inconspicuous; head somewhat elongate, parallel, rather abruptly, obliquely and arcuately narrowed at base, the eyes notably small, slightly convex; occiput feebly impressed along the middle; antennae extending somewhat beyond the tips of the elytra, gradually and rather strongly incrassate distally, the second and third joints elongate, the former the shorter, the next two or three joints perceptibly elongate, thence distinctly transverse to the tenth, the eleventh large, ogivally pointed at tip, longer than the two preceding combined and evidently stouter; prothorax nearly a third wider than the head and a fifth wider than long, widest near apical third, the sides feebly converging thence basally and broadly arcuate to the apex, the surface with a large oval concavity in basal half and median third; elytra transverse, slightly wider and evidently shorter than the prothorax, subparallel, the humeri slightly exposed at base; abdomen parallel, rather wider than the elytra; legs long, the hind tarsi about three-fourths as long as the tibiae. Length 2.9 mm.; width 0.8 mm. British Columbia (Glenora), — H. F. Wickham. **terminalis** n. sp.

The sex of the single specimen before me is not determinable with certainty, although probably male, as the sixth ventral plate seems to be minutely and feebly emarginate at the middle.

Homalotusa n. gen.

This genus resembles the European *Homalota* Mann., as interpreted by Rey, but its members are usually materially stouter. It appears to be a local type, though rather abundant both specifically and individually. The four species before me are the following: —

Form moderately stout, rather strongly convex, parallel, somewhat shining, feebly micro-reticulate, the elytra more strongly and duller, the abdomen very minutely strigilate in broken transverse lines; punctures fine, inconspicuous, rather more distinct and dense on the elytra, moderately close-set throughout on the abdomen; pubescence somewhat long, pale and distinct, subdecumbent; color rather pale piceous, the abdomen darker, pale at apex, the legs pale; antenna infuscate, paler basally, slender, moderately incrassate distally, attaining the tips of the elytra, the second and third joints much elongated, the former very slightly the longer, succeeding two longer than wide, six to ten nearly as long as wide, the eleventh pointed, barely as long as the two preceding combined; head orbicular, as long as wide, arcuate and narrowed behind the eyes, the neck four-fifths as wide, the eyes moderate, not very convex, the surface evenly convex; prothorax about a fifth wider than the head and a fifth wider than long, parallel, evenly arcuate at the sides, the apex and base subequal in width, the surface even, with a very small feeble rounded impression before the scutellum; elytra but slightly transverse, about a fifth wider and a third longer than the prothorax, narrowly impressed on the suture behind the scutellum, the humeri but very slightly exposed at base; abdomen parallel, slightly narrower than the elytra. Length 3.9 mm.; width 0.85 mm. Montana (Helena), — H. F. Wickham...................... **helenica** n. sp.

Form nearly similar, equally shining and similarly sculptured, the pubescence rather shorter, black, the abdominal apex rufescent, the elytra dark piceo-testaceous; legs pale brown, the antennae blackish, paler basally, nearly as in *helenica* but somewhat shorter, not quite extending to the tip of the elytra, the second joint more distinctly longer than the third; head nearly similar but more abruptly constricted at base; prothorax rather shorter and more transverse, nearly a fourth wider than long and a fourth wider than the head, the sides parallel and similarly feebly arcuate, the small impression at the base also similar; elytra shorter and more transverse, slightly wider than the prothorax and a fourth longer; abdomen parallel and straight at the sides, evidently narrower than the elytra. Length 4.2 mm.; width 0.85 mm. California (Lake Tahoe)................................**tahoensis** n. sp.

Form much shorter and less convex, less shining, more strongly micro-reticulate, the elytra very dull; punctures very close-set throughout; pubescence short and rather inconspicuous; color blackish, the elytra castaneous, the abdomen pale at tip, the legs pale brown; antennae nearly similar, blackish, the first joint testaceous, not quite extending to the tips of the elytra, the distal joints obtrapezoidal, the second but slightly longer than the third, four to seven longer than wide, eight to ten as long as wide, the eleventh not as long as the two preceding combined; head nearly as in *tahoensis* but having a small impression at the middle of the vertex; prothorax relatively smaller, more than a fourth wider than the head, a fifth wider than long, parallel and broadly, feebly arcuate at the sides, the basal angles similarly obtusely rounded, the surface with a much larger and more conspicuous rounded impression before the scutellum; elytra large, a third wider and two-fifths longer than the prothorax, only slightly wider than long, not very evidently impressed behind the scutellum, the humeri more exposed at base; abdomen parallel, narrower than the elytra, more shining than the anterior parts, the punctures sparse toward tip, close-set elsewhere. Length 3.8 mm.; width 0.93 mm. Idaho (Coeur d'Alene), — H. F. Wickham..............**fuscula** n. sp.

Form stout and rather feebly convex as in *fuscula*, similarly dull and strongly micro-reticulate, the abdomen less finely sculptured and reticulate rather than strigilate, somewhat less shining; punctures similarly very fine, dense on the elytra; color pale yellowish-brown throughout, the head more piceous, the abdomen with a large picescent cloud before the apex; antennae fuscous, the basal joint pale, more slender, extending almost to the tips of the elytra, the second joint but slightly longer than the third, joints four to eight very distinctly, nine and ten slightly, longer than wide, the eleventh sharply pointed, not as long as the two preceding combined; head as wide as long, the sides arcuate and converging behind the eyes, which are more prominent, the vertex with a feeble median impression; prothorax much larger than in *fuscula*, about a fifth wider than the head and a fourth wider than long, widest at apical two-fifths, the sides feebly arcuate, becoming very slightly convergent and straighter toward base, the ante-scutellar impression very small and feeble as in *helenica;* elytra large, about a third wider and nearly one-half longer than the prothorax, the humeri somewhat exposed; abdomen parallel, but little narrower than the elytra. Length 3.5 mm.; width 0.9 mm. Idaho (Coeur d'Alene)........**pallida** n. sp.

No indication of sex is observable in any of the specimens at hand.

Valenusa n. gen.

A species of very distinct facies forms the type of this genus, allied to *Atheta* but differing in its elongate slender form, pyriform head with small and anterior eyes, much shorter mesosternal process, which is very acute, and in the extremely extended longitudinal discontinuity in the form of a narrow, acutely rounded ridge, the metasternum being broadly arcuate and not entering the intercoxal space; the coxae are closely contiguous. The infra-lateral ridges of the head extend forward more than half way to the buccal opening and the hind tarsi are short, with the basal joint very much shorter than the second. The type may described as follows:—

Form very slender, parallel, moderately convex, alutaceous, distinctly microreticulate, the abdomen polished and minutely strigilate in transverse wavy lines; pubescence short, decumbent, inconspicuous, the punctures very fine, rather close-set but indistinct, sparse on the abdomen posteriorly; color pale testaceous, the head but little darker, the abdomen feebly infuscate except at the apices of the segments; legs pale, the antennae infuscate, the first joint pale, rather stout, distinctly incrassate distally, extending to about basal third of the elytra, the second joint distinctly longer than the third, fourth slightly longer than wide, fifth to tenth progressing from as long as wide to distinctly transverse, the eleventh obtusely pointed, about as long as the two preceding combined; head inflated toward base with rounded sides, slightly elongate, abruptly but feebly constricted at base, the neck wide; eyes small, only slightly convex; prothorax but slightly though evidently wider than the head, a fifth or sixth wider than long, subparallel, widest before the middle, the sides feebly arcuate, becoming straighter and just visibly convergent posteriorly to the obtusely rounded basal angles, the surface very finely and feebly impressed along the median line almost from apex to base, becoming gradually slightly less feebly so basally; elytra but very slightly wider and only just visibly longer than the prothorax, the sides feebly diverging from the humeri, which are very slightly exposed at base; abdomen nearly as wide as the elytra, parallel, elongate, the first three tergites strongly and equally impressed at base. Length 3.4 mm.; width 0.65 mm. California (Pomona, Los Angeles Co.),— H. C. Fall. **parallela** n. sp.

There are no external indications of sex in the single type specimen in my cabinet.

Eurynotida n. gen.

In general facies this genus differs wholly from any other of the present tribe, shorter and even broader than any form of *Hoplandria*, the middle coxae are closely contiguous, with the mesosternal process extremely short and cuspidiform, the metasternum arcuato-truncate and not at all projected between them; the infra-lateral carinae of the head are strong and entire, the maxillary palpi very slender, setose, the antennae slender, subfiliform, the hypomera invisible from the sides and the hind tarsi rather long, slender, with the basal joint as long as the next three combined. We have at present two species as follows:—

Form very stout, rather convex, shining, not reticulate, minutely, not very closely and indistinctly punctulate, testaceous in color, the head and elytra darker, piceous-brown, the latter nubiliously paler about the scutellum and each testaceous at the outer apical angle, the inner outline of the pale spot oblique and straight; abdomen with a large nubilous piceous cloud before the tip; legs and antennae pale flavate throughout; pubescence rather long, pale, prostrate but inconspicuous except on the abdomen, where it is longer and intermixed with sparse erect tactile setae; head transverse, small, rapidly and arcuately narrowed behind the moderate and somewhat prominent eyes, convex, unimpressed, the neck only moderately broad; antennae slender, extending almost to the tips of the elytra, the second joint rather longer than the third, both much elongated, four to ten more or less distinctly longer than wide and only just visibly increasing in thickness, the eleventh very slender, pointed, almost as long as the three preceding combined; prothorax about twice as wide as long, almost four-fifths wider than the head, parallel and evenly arcuate at the sides, broadly rounded at base, the basal angles well rounded, the surface wholly unimpressed; elytra short, transverse, the base not quite as wide as the prothorax, the suture about as long as the median line of the latter, the sides feebly diverging; abdomen not quite as wide as the elytra, parallel, narrowed slightly at tip, the basal tergites not very obviously impressed at base. Length 2.2 mm.; width 0.87 mm. Texas (Del Rio),— H. F. Wickham.
ornata n. sp.

Form, sculpture and pubescence nearly similar, slightly shorter, testaceous, the head blackish, the elytra piceous-brown with the sutural region and external apical angles pale testaceous as in *ornata*, the abdomen with a similar piceous cloud; head larger, the eyes moderate and similarly somewhat coarsely faceted; antennae with the joints two to four elongate, uniformly decreasing in length, the second more evidently longer than the third; prothorax more than twice as wide as long, the sides not parallel but evidently converging from the rounded basal angles to the apex, barely three-fourths wider than the head, similarly wholly unimpressed; elytra nearly similar but more transverse, evidently shorter and narrower than the prothorax; abdomen at base as wide as the elytra, thence strongly and arcuately narrowed to the apex, which is relatively much narrower than in *ornata*. Length 1.7 mm.; width 0.8 mm. Arizona (Phoenix) .... **arizonica** n. sp.

No distinct sexual modifications are apparent, the sixth tergite being broadly bilobed at tip in each of the single types at hand.

BOLITOCHARINI.

Silusa Er.

Besides the two species described below, this genus will include the American species *californica* Bern., and *vesperis* Csy., these having the peculiar oral structures of *Silusa;* but the form that I have identified as *gracilis* Sachse, does not seem to be a true *Silusa*, having more the facies of *Leptusa*, and *Silusa nanula* Csy., belongs evidently to a different genus: —

Form parallel, not very stout, convex, shining, the integuments wholly devoid of minute sculpture, blackish, the elytra, abdominal apex and apices of all the segments paler, castaneous; legs pale, the antennae fuscous, pale at tip and toward base; pubescence not dense, moderate in length; punctures fine, not close, impressed and simple, those of the elytra larger, close-set and asperate, sparse and fine throughout on the abdomen; head wider than long, the eyes moderate; antennae extending to basal third of the elytra, stout and gradually incrassate distally, the elongate second and third joints equal, the subapical moderately transverse, the eleventh pointed and as long as the two preceding; prothorax two-fifths wider than long and fully one-half wider than the head, the sides broadly arcuate, more converging toward apex, the basal angles obtuse but not rounded, the surface with a feeble transverse impression before the scutellum; elytra only just visibly wider but two-fifths longer than the prothorax, strongly and broadly impressed behind the scutellum, the impression paralleling the sutural margin posteriorly; abdomen narrower than the elytra, parallel, the first three tergites strongly and broadly impressed at base, the fourth more narrowly and feebly; hind tarsi short, the first four joints short and subequal. Length 3.8 mm.; width 0.88 mm. New York (Catskill Mts.), — H. H. Smith. **valens** n. sp.

Form much stouter, moderately convex, shining, pale flavo-testaceous, the head and a large ante-apical abdominal cloud blackish, the elytra very faintly shaded with piceous toward the external apical angles; punctures very fine, not very close-set, those of the elytra more visible, asperulate and close, those of the abdomen somewhat sparse though closer than in *valens;* head nearly as long as wide, the eyes well developed; antennae attaining the middle of the elytra, joints five to ten rather stout, subequal in width and rather strongly transverse, the eleventh conoidal and rather longer than the two preceding; prothorax strongly transverse, fully one-half wider than the head and nearly three-fourths wider than long, the sides broadly arcuate, slightly converging toward apex, the basal angles obtuse and somewhat blunt, the surface with a very feeble transverse impression before the scutellum; elytra only very slightly wider than the prothorax but two-thirds longer, somewhat narrowly impressed for some distance behind the scutellum; abdomen much narrower than the elytra, parallel, the basal impressions rather narrow and not very deep, the third tergite scarcely and the fourth not at all impressed. *Male* with a minute rounded tubercle on the fifth tergite at some distance from the apical margin. Length 2.7 mm.; width 0.83 mm. California (Licking Fork of the Mokelumne River — 3,000 feet), — F. E. Blaisdell……………**decolorata** n. sp.

The single type of *valens* is evidently a female. *Decolorata* differs from *californica* Bern., in its paler coloration and in its shorter and relatively broader prothorax, shorter elytra and subparallel and not gradually incrassate antennae.

Eucryptusa n. gen.

This name is proposed for the species described by the writer (Annals N. Y., VII., p. 352) under the name *Silusa nanula.* It differs from *Silusa* in its smaller, unemarginate mentum, less elongate labial palpi and stouter and shorter paraglossae, as well as in its still shorter first four subequal joints of the hind tarsi and in its system of sculpture.

Pancota n. gen.

This genus is also allied to *Silusa*, differing in the very small size of the body, smaller and medially sinuate mentum and less elongate palpi, but, more particularly, in the extremely slender and filiform tarsi, the posterior being somewhat more elongate but with the first four joints subequal as usual in this group. The single known type is the following: —

Body slender, moderately convex, shining, without minute ground sculpture of any kind, pale brownish-flavate in color, the head and posterior half of the abdomen nubilously piceous, the legs and antennae pale; punctures relatively rather large, impressed, somewhat close-set, those of the elytra dense and more asperate but scarcely larger, of the abdomen very fine toward base but larger, longitudinally asperate and somewhat sparser toward tip; head wider than long, the eyes moderate; antennae short and very slender, only very slightly but gradually incrassate distally, about as long as the head and prothorax, the second joint somewhat longer than the third, the subapical joints evidently transverse, the last pointed and about as long as the preceding two; prothorax strongly transverse, about three-fourths wider than long and fully two-fifths wider than the head, the sides subparallel, evenly and strongly arcuate, the basal angles obtuse and slightly rounded, the surface with the merest trace of a fine short linear and transverse impression before the scutellum; elytra parallel, transverse, obviously narrower than the prothorax and of equal length, with a very minute post-scutellar impression; abdomen parallel, nearly as wide as the elytra, the first three tergites narrowly, rather feebly and decreasingly impressed at base, the fourth wholly unimpressed. Length 1.8 mm.; width 0.43 mm. New York (Catskill Mts.), — H. H. Smith .... **collaris n. sp.**

The single type is evidently a female.

Dianusa n. gen.

The body in this genus is very small, rather stout, the middle coxae very narrowly separated, the mesosternal process extending two-thirds their length, attenuate at tip and nearly attaining the angular prolongation of the metasternum, the infra-lateral carinae of the head complete, the eyes moderate, not very finely faceted, the neck slender, less than half as wide as the head and the hind tarsi short, with the first four joints short and equal. The mentum is transverse and truncate and the labial palpi shorter and stouter than in *Silusa*. The single type may be known by the following characters:—

Body parallel, moderately convex, alutaceous, micro-reticulate throughout, the reticulae of the abdomen larger and faint; color testaceous, the head and the abdomen, except at apex and toward base, blackish; legs and antennae pale; punctures very minute, not dense, subgranuliform, more distinct on the elytra, the pubescence moderate; head transversely elliptical, convex, rather small, the antennae short, not longer than the head and prothorax, feebly and gradually incrassate distally, the second joint longer and thicker than the third, the subapical joints transverse; prothorax short, two-fifths wider than the head and three-fourths wider than long, the sides parallel and evenly arcuate, the basal angles obtuse and slightly rounded, the surface extremely faintly, transversely impressed before the scutellum; elytra well developed, equal in width to the prothorax and nearly one-half longer, parallel, with a small sutural depression behind the scutellum; abdomen distinctly narrower than the elytra, parallel, shining, sparsely punctured toward tip, the first three tergites narrowly and equally impressed at base. Length 1.7 mm.; width 0.42 mm. California (Pasadena), — A. Fenyes.............................**pasadenae** n. sp.

The male has some irregularly scattered granules toward apex of the fifth and sixth tergites throughout the width, the sixth truncate, with about eight rather large serrulations thoughout the width, the median interval rather wider than the others.

Ulitusa n. gen.

This genus resembles *Silusa* but differs in the minute size and in the truncate mentum, not prolonged anteriorly at the sides and laterally impressed on the surface; the labial palpi are long but much stouter, three-jointed, the infra-lateral carinae of the head strong and entire, the middle coxae and adjacent parts as in the preceding genus, but with the acute mesosternal process freer; the hind tarsi are moderately stout, nearly three-fourths as long as the tibiae, with the first four joints short and subequal; the eyes are rather small, prominent, the sides of the head behind them somewhat strongly convergent and evenly arcuate to the neck. The sculpture is coarse and conspicuous. We know at present two species as follows: —

Body rather slender, moderately convex, the surface without minute ground sculpture, except a feeble reticulation toward the abdominal apex, shining, coarsely and closely but not densely punctate throughout, except on the abdomen, which is finely and sparsely punctate; pubescence inconspicuous; color dark testaceous, with the elytra blackish, paler at the humeri and also along the apical margin, the abdomen with a blackish or piceous subapical cloud, the legs pale, the antennae black, pale at apex and gradually paler toward base; head nearly as long as wide, strongly, closely punctate, the antennae stout, gradually incrassate distally, the second and third joints elongate, the former somewhat the longer, the subapical joints transverse, the pale eleventh joint stout and conoidal; prothorax short, a third wider than the head and fully two-thirds wider than long, widest before the middle, the sides converging and sinuate basally, the angles acute, not at all rounded and slightly prominent, the surface not obviously impressed; elytra not wider than the prothorax and nearly one-half longer, feebly impressed behind the scutellum, the humeri evidently exposed at base; abdomen slightly narrower than the elytra, parallel, the first three tergites strongly and equally impressed at base, with their surfaces thence notably convex to tip, the remaining plates nearly flat. Length 1.9 mm.; width 0.44 mm. Ohio (Cincinnati), — Chas. Dury......**cribratula** n. sp.

Body nearly similar but smaller, convex, rather shining, rufo-testaceous throughout, except the head and a subapical abdominal cloud which are blackish; legs pale, the antennae black, gradually paler toward base but not at apex; head and elytra coarsely, not densely punctate, the pronotum notably less coarsely so, the abdomen strongly and rather closely but sparsely toward tip; pubescence rather coarse, pale in color; head wider than long, convex, the antennae longer than the head and prothorax, less stout than in the preceding species, gradually incrassate distally, the subapical joints transverse, the second much longer than the third; prothorax less transverse, fully a third wider than the head and one-half wider than long, widest before the middle, the sides thence moderately converging to the basal angles, which are not so distinct or prominent as in *cribratula*, the surface not evidently impressed; elytra somewhat wider than the prothorax and a third longer, impressed along the suture for a long distance behind the scutellum, the humeri but slightly exposed; abdomen narrower than the elytra, nearly as in *cribratula*, the legs similarly rather short and slender. Length 1.65 mm.; width 0.4 mm. Ohio (Cincinnati), — Chas. Dury....**pusio** n. sp.

The type of *cribratula* is a female; in *pusio*, however, the male has a rather narrow, acutely elevated carina in almost apical half of the fifth tergite, not quite attaining the apical margin, the sixth concealed in the type.

Goniusa n. gen.

I would propose this name for a genus represented at present by a single species, described by LeConte many years ago under the name *Euryusa obtusa*. It resembles *Euryusa* somewhat in general form, but differs conspicuously in the structure of the hind tarsi, the basal joint of the latter being about as long as the next two combined in that genus, while in *Goniusa* it is about as long as the succeeding joint, the first four subequal in length and rather elongate, the entire tarsus being about two-thirds as long as the tibia. The intermesocoxal parts are nearly as in *Euryusa* and many other genera of the subtribe, but the body is much broader, the abdomen wider and with the impression of the third tergite feeble, becoming wholly obsolete toward the sides of the plate.

Amenusa n. gen.

In its subdepressed, parallel form and dense dull teguments, the general aspect of this distinct genus is not unlike *Placusa*, but it differs in having the middle coxae rather widely separated, the mesosternal process very short, truncate and virtually abutting against the very long broad metasternal projection. The infra-lateral carinae of the head seem to be entire but are extremely feeble or obsolescent anteriorly and the hind tarsi are short, with the first four joints short and subequal, the fifth long, almost equaling the four basal together; the claws are long, slender and feebly arcuate. The single known species may be thus briefly described: —

Form rather slender, parallel, feebly convex, alutaceous, black or blackish, the elytra paler, piceous; legs pale, the antennae blackish, gradually paler toward base; teguments densely micro-reticulate, the abdomen minutely, faintly strigilate in transverse wavy lines; punctures very fine, close-set but indistinct except on the elytra, very fine on the abdomen and sparse, the latter more shining; pubescence short and inconspicuous; head wider than long, the eyes rather well developed, prominent, the sides strongly converging and broadly arcuate behind them to the neck; antennae fully attaining basal third of the elytra, gradually and moderately incrassate distally, the elongate second and third joints subequal, the subapical joints transverse, the eleventh subpyriform; prothorax transverse, a fourth wider than the head and one-half wider than long, widest at apical third, the sides broadly arcuate, feebly converging and straight toward base, the angles obtuse but not at all rounded, the surface not distinctly impressed; elytra only just visibly wider but one-half longer than the prothorax, parallel, very feebly impressed behind the scutellum, the humeri somewhat exposed at base; abdomen obviously narrower than the elytra, the first three tergites narrowly and subequally impressed at base. Length 2.7 mm.; width 0.57 mm. California (Pomona, — Los Angeles Co.), — H. C. Fall...**angustula** n. sp.

The male has no discal marks on the apical tergites but the sixth is broadly truncate at tip, the edge throughout closely pectinate, the teeth triangular, the extreme lateral tooth on each side more isolated, longer and more slender.

Sibiota n. gen.

This genus is perhaps most closely allied to *Sipalia*, though evidently isolated. The body is slender, with the elytra abbreviated and the infra-lateral carinae of the head wholly obsolete, the eyes small and anterior and the middle coxae approximate. The hind tarsi are rather short, the basal joint evidently longer than the second though not as long as the next two combined. The type may be described as follows: —

Form slender, subparallel, moderately depressed, subalutaceous, the integuments feebly micro-reticulate throughout, pale rufo-testaceous, the abdomen black, slightly paler at tip, the legs pale, the antennae infuscate distally; punctures very fine, moderately close-set but indistinct, sparse on the abdomen; pubescence pale, subdecumbent, rather long and distinct; head pyriform, swollen toward base with arcuate sides, rather longer than wide, the neck somewhat narrow; antennae extending to the middle of the elytra, gradually and moderately incrassate distally, the subapical joints transverse, the second evidently longer than the third; prothorax quadrate, distinctly wider than the head, very slightly wider than long, just visibly wider near apical third than at base, the sides feebly arcuate, rounding anteriorly to the apex, less arcuate basally, the basal angles somewhat broadly rounded, the surface broadly, feebly concave along median third from base nearly to the apex, the concavity gradually disappearing; elytra equal in width to the prothorax and rather less than three-fourths as long, the sides somewhat diverging from the base; abdomen as wide as the elytra, the sides parallel, the first three tergites narrowly and feebly impressed at base; legs moderately long and slender. Length 2.35 mm.; width 0.5 mm. Oregon (Portland), — H. F. Wickham.

impressula n. sp.

The type appears to be a female. *Sibiota* differs from *Sipalia* in the obsolete infra-lateral carinae of the head, and, from *Typhlusida* (ante, p. 263; — type *flava* Kr.), it differs in its longer basal joint of the hind tarsi.

Leptusa Kr.

The genus *Leptusa*, like *Oxypoda*, is composite as organized at present in American literature, but the time is not yet ripe to study it in detail and it must suffice for the present to announce that *brevicollis* will constitute one group, *seminitens* and *opaca* another, *americana* Bern., a third, and the species described below two more. The species selected for description at the present time are the following:—

Form rather slender, parallel, convex, the anterior parts feebly reticulate, the head and pronotum not very finely but closely and feebly punctate and dull, the elytra closely, more deeply and asperately punctured and more shining, the abdomen devoid of minute ground sculpture except a feeble reticulation at the extreme apex, not very finely, closely punctured and somewhat shining; color dark and uniform piceous-brown, the abdomen pale rufo-testaceous, with a black cloud involving the fourth tergite and basal half of the fifth; legs pale, the antennae black, pale at apex and toward base; pubescence pale, subdecumbent; head wider than long, narrowed behind the moderate and prominent eyes, the antennae almost attaining the middle of the elytra, stout, gradually incrassate, the second and third joints much elongated and subequal, the subapical joints transverse; prothorax almost a third wider than the head and fully two-fifths wider than long, widest at apical two-fifths, where the sides are rather prominently rounded, thence converging and feebly sinuate to the base, the basal angles rather prominent, not evidently blunt, the surface not obviously impressed; elytra only just visibly wider than the prothorax and barely two-fifths longer, parallel, the humeri somewhat exposed at base; abdomen long, parallel, evidently narrower than the elytra, the first three tergites strongly and equally impressed at base. Length 2.4–3.2 mm.; width 0.6–0.65 mm. Iowa (Iowa City) and Ohio (Cincinnati).................... **tricolor** n. sp.

Form, coloration and lustre nearly as in *tricolor*, the apical joint of the antennae not so completely pale; punctures of the anterior parts rather large and very close-set, those of the head very shallow and variolate, of the pronotum deeper and somewhat asperulate, of the elytra still stronger and asperate, of the abdomen fine but strong, close but notably less so than in *tricolor* and becoming rather sparse toward tip; head nearly as in *tricolor* but more shining, the antennae shorter and notably less strongly incrassate distally, attaining about basal third of the elytra, the second and third joints subequal, the subapical transverse; prothorax distinctly wider than the head, about two-fifths wider than long, nearly as in *tricolor* but with the basal angles rather more obtuse and less prominent though very distinct, the surface with the merest trace of transverse impression before the scutellum; elytra relatively much larger, fully a fourth wider than the prothorax and nearly one-half longer, the humeri well exposed; abdomen narrower, much narrower than the elytra, parallel, similarly impressed. *Male* with a very short and feeble carinule behind the centre of the fifth and sixth tergites, the latter broadly sinuato-truncate and minutely, closely serrulate at tip. Length 2.4 mm.; width 0.63 mm. Mississippi (Vicksburg).. **canonica** n. sp.

Form more slender, parallel, convex, alutaceous, the abdomen more shining; punctures of the head and pronotum extremely fine, feeble and indistinct, close-set, of the elytra only somewhat less fine but more obvious, dense and feebly asperulate, of the abdomen very fine and close-set throughout; color pale rufo-testaceous, the entire abdomen black, the legs and antennae pale, the latter infuscate distally, the apex not paler; pubescence pale and close but short and not very conspicuous; head wider than long, subparallel at the sides, abruptly constricted at base, the eyes rather large, convex; antennae short, only slightly longer than the head and prothorax, gradually but feebly incrassate distally, second and third joints only moderately elongate and subequal, the subapical transverse, the eleventh deeply excavated near the apex; prothorax fully a fourth wider than the head but only a fourth or fifth wider than long, subparallel, widest before the middle, the sides broadly arcuate, rather straighter toward base, the angles obtuse and slightly rounded, the surface scarcely visibly transversely impressed before the scutellum; elytra about a fifth wider and nearly a third longer than the prothorax, the humeri slightly exposed; abdomen distinctly narrower than the elytra, long, parallel, the first three tergites only very narrowly and feebly impressed at base, their surface flat and not convex as in the two preceding species; basal joint of the hind tarsi as long as the next two combined; sexual characters not evident. Length 2.1–2.5 mm.; width 0.55–0.61 mm. North Carolina (Tryon) and Ohio (Cincinnati). **semirufa** n. sp.

Tricolor, and possibly the allied *canonica* also, sometimes occurs in the company of a rather small piceous ant with paler brown legs.

Phaenogyra Rey.

The indication, on page 278 of the present paper, that *Phaenogyra* is an exclusively European genus, can fortunately be corrected now by the chance discovery of a representative among some unclassified material in my cabinet. This circumstance is interesting, not only in proving *Phaenogyra* to be American as well as European, but in being the only evidence known to me of the occurrence of the subtribe Gyrophaenae in California. It may be described as follows: —

Rather stout, moderately convex and shining, blackish-piceous in color throughout, the legs and antennae pale, the latter feebly infumate distally; integuments coarsely and strongly micro-reticulate, the abdomen more feebly so; pubescence short, stiff and sparse; head transverse, with fine scattered punctures except broadly along the median line, the eyes moderate, prominent; antennae barely as long as the head and prothorax, slender basally, abruptly stout from the fifth joint, the latter to the tenth loose, feebly incrassate and strongly transverse, the eleventh oval, pointed, not quite as long as the two preceding combined, fourth joint small and transverse; prothorax small, wider than the head, one-half wider than long, the sides converging and feebly arcuate from the broadly rounded basal angles to the apex, the base strongly, subcircularly rounded and finely reflexed, the punctures minute, sparse and irregularly distributed; elytra large, more strongly, asperately and uniformly punctured, rather closely so, about a third wider than long, nearly two-fifths wider and one-half longer than the prothorax, the humeri well exposed and rounded, the suture impressed almost throughout the length; abdomen at base as wide as the elytra, feebly tapering and with slightly arcuate sides thence to the tip, minutely, rather sparsely punctured throughout. Length 1.4 mm.; width 0.63 mm. California (Ojai), — H. C. Fall......**californica** n. sp.

The abdomen in the single specimen at hand is retracted at apex, so that the sex cannot be determined.

Thinusa Csy.

The first of the following species is the largest Phytosid known to me: —

Form stout, parallel, rather convex, brownish-testaceous, the prothorax clearer, the abdomen black; legs pale, the antennae infuscate distally; integuments dull, minutely and densely granulato-reticulate, the punctures very minute and not distinct even on the elytra, the abdomen finely, evenly and rather closely punctulate; pubescence pale, rather long and conspicuous, directed outwardly from the median line on the pronotum; head longer than wide, the eyes well developed and somewhat coarsely faceted but not prominent; antennae moderately incrassate distally, one-half longer than the head, the second joint nearly as long as the next two combined, the subapical transverse, the eleventh very short, conoidal; prothorax slightly wider than the head and somewhat wider than long, widest at apical two-fifths, where the sides are broadly arcuate, thence rather distinctly converging and somewhat sinuate to the arcuato-truncate base, the angles very slightly rounded, the surface with a very fine, feebly impressed and nearly entire median line; elytra scarcely as wide as the prothorax and scarcely more than two-thirds as long; abdomen parallel, very long, as wide as the prothorax, the first three tergites strongly and the fourth feebly impressed at base; hind tarsi longer than in *maritima*, with the first four joints somewhat elongate and equal; claws much longer, compressed and somewhat distorted. Length 2.6 mm.; width 0.68 mm. Queen Charlotte Island (Massett), — J. H. Keen........**fletcheri** n. sp. (Fvl. MS).

Form very slender, minute, blackish-castaneous, the abdomen black, the legs and antennae pale, opaque, densely and minutely granulato-reticulate, the abdomen less strongly so; pubescence short and inconspicuous; punctures very minute, obscure, distinct but fine and close-set on the abdomen; head longer than wide, the eyes well developed and slightly prominent; antennae as long as the head and prothorax, distinctly and gradually incrassate distally, the second joint as long as the next two combined, the subapical transverse; prothorax very slightly wider than the head and almost as long as wide, widest anteriorly, where the sides are rounded, thence rather strongly converging and straighter to the obviously rounded basal angles, the surface rather broadly but feebly impressed along the median line almost to the apex; elytra not quite as wide as the prothorax and three-fourths as long, angularly emarginate toward the suture at tip, the sides feebly diverging from the humeri, which are gradually rounded to the prothorax and not exposed at base; abdomen but little longer than the remainder of the body, parallel, as wide as the elytra, the first three tergites very narrowly and extremely feebly impressed at base; hind tarsi shorter than in *fletcheri* and with the basal joint distinctly longer than the second — not shorter as in *maritima*, the claws minute. Length 1.3 mm.; width 0.3 mm. California (Sta. Barbara) .... **obscura** n. sp.

The basal impressions of the abdomen are much larger and deeper in *fletcheri* than in *maritima* or *obscura* and the last may be distinguished from *maritima* by its smaller size, relatively narrower prothorax, darker color, longer basal joint of the hind tarsi and closer abdominal punctuation.

Amblopusa Csy.

The chief points of distinction between this genus and *Bryobiota* Csy., are the very broad subvertical hypomera and short third antennal joint of the former. In the latter genus the hypomera, although only feebly inflexed, are narrow, as usual, and the third antennal joint is distinctly elongate, in fact almost as long as the second; the eyes, also, although small and coarsely faceted, are better developed. The following species departs radically from *brevipes* in its larger size, very much longer tarsal claws and more developed eyes: —

Form slender, parallel, dull, very minutely and densely sculptured, the punctures very fine, close-set and indistinct, somewhat more visible on the elytra, extremely minute, close-set but evident on the abdomen, which is only very obsoletely reticulate and rather shining; color pale rufo-testaceous, the abdomen black, feebly paler at tip, the legs pale; pubescence rather long, pale and conspicuous except on the abdomen; head large, scarcely longer than wide, feebly inflated at base, subdepressed, feebly impressed on the median line toward base, the eyes small, evenly oval, consisting of about twenty coarse facets, the posterior facets less convex than the anterior; antennae missing in the type; prothorax slightly narrower than the head, not quite as long as wide, widest near the apex, the sides rather strongly converging and almost straight to the base, the angles obtuse but scarcely at all blunt, the surface broadly, feebly impressed along the middle almost throughout; elytra evidently narrower than the prothorax and but little wider than the base of the latter, parallel, two-thirds as long; abdomen one-half longer than the remainder of the body, subparallel, fully as wide as the head, the first five segments very narrowly, feebly and subequally impressed at base; hind tarsi but little more than half as long as the tibiae, stout, the first four joints very short and subequal, the claws very long, slender and evenly arcuate. Length 2.5 mm.; width 0.46 mm. Queen Charlotte Island (Massett), — J. H. Keen..**borealis** n. sp.

I have before me but a single specimen of undetermined sex and it has unfortunately lost all but the basal joint of the antennae.

HYGRONOMINI.

Bamona Shp.

The following species belong to *Bamona* proper and not to *Gyronycha*, and the first is interesting in proving its extended distribution, paralleling that of *Gyronycha:* —

Form slender, rather convex, polished, black or blackish throughout, the legs pale piceous, the antennae black, gradually paler basally; integuments devoid of any trace of minute ground sculpture, very finely, not densely punctured throughout; pubescence fine, short, ashy and rather distinct on the elytra, elsewhere inconspicuous; head nearly as wide as long, the sides very broadly rounded and converging behind the moderate eyes to the neck, which is fully three-fifths as wide; antennae thick, not quite attaining the middle of the elytra, gradually incrassate distally, the joints close-set, obtrapezoidal distally, opaque, densely clothed with a mixture of short stiff silvery, and longer fine and dark, hairs, the second longer than the third, both elongate, the subapical moderately transverse, the eleventh somewhat thicker, oval, rather longer than the two preceding; prothorax slightly narrower than the head, somewhat longer than wide, widest near apical third, where the sides are subprominently rounded, thence feebly converging and subsinuate to the base, the surface wholly unimpressed; elytra large, four-fifths wider and two-fifths longer than the prothorax, the humeri well exposed at base; abdomen much narrower than the elytra, parallel, the first three tergites strongly but narrowly impressed at base; hind tarsi slender, with the basal joint about as long as the next two combined, the fifth gradually thickened toward tip. Length 1.7 mm.; width 0.4 mm. North Carolina (Asheville) ....**carolinae** n. sp.

Form very slender, rather convex, highly polished, minutely, rather closely but indistinctly punctured, sparsely toward the tip of the abdomen as usual, the pubescence inconspicuous; color blackish, the prothorax, abdomen, except a subapical darker region, legs and the antennae toward base, pale; head smaller than in *falliana*, with very much more broadly rounded basal angles, the antennae nearly similar but scarcely so stout, fully attaining the middle of the elytra; neck barely half as wide as the head; prothorax much narrower than the head and distinctly elongate, subprominently rounded at the sides at apical third, thence feebly, subsinuately narrowed to the base, the surface wholly unimpressed; elytra more than four-fifths wider but less than a third longer than the prothorax; abdomen much narrower than the elytra, the three basal impressions very narrow and only moderately deep, polished and smooth as usual; hind tarsi slender, almost three-fourths as long as the tibiae, the basal joint somewhat longer than the next two combined. Length 2.1 mm.; width 0.35 mm. California (Mokelumne Hill, Calaveras Co.),—F. E. Blaisdell........................**tenuissima** n. sp.

Carolinae is almost exactly similar in size and general form to the Californian *falliana*, but differs in the deeper and more uniform blackish coloration and in having the basal angles of the head very much more broadly rounded. *Tenuissima* is decidedly more slender, with the basal angles of the head also more broadly rounded than in *falliana*, but rather less so and with a narrower neck than in *carolinae*.

SUBFAMILY STAPHYLININAE.

Tribe XANTHOLININI.

The chief peculiarities of this Staphylinid tribe reside in the formation of the antennae and front, the relatively approximate insertion of the former and in the singular modification of the elytral suture characterizing most of the genera. The antennae are strongly geniculate at the tip of the more or less elongate basal joint, the latter, as well as the two or three following joints, being subglabrous and sparsely setulose, while those which follow to the tip are usually compactly joined, transverse to a greater or less degree, minutely and densely pubescent and finely, closely sculptured, in addition, to the sparse erect tactile setae; they are never very widely separated at the extreme frontal apex and the apical margin between them is more or less closely and deeply bisinuate, the intermediate narrow lobe or epistoma being generally truncate and bearing at tip the small transverse, usually finely emarginate or deeply, narrowly cleft labrum. In the Metoponci the epistoma is singularly prominent dorsally and canaliculate, and, in the Diochi, the labrum is entire and even finely denticulate at the middle. The mandibles are moderate in size, dentate within and variously modified on the exterior surface, which is either entire as in *Eulissus*, grooved as in the majority of the Xantholini or with a sinuous stria as in *Metoponcus*, with rounded external edge, as a rule, or with an acute edge as in *Diochus.* The maxillary palpi vary greatly, having the third joint long or short and the fourth correspondingly short or elongate, finely aciculate and very slender to conical and gradually pointed; they are always coarsely setulose and glabrous, except in *Diochus*, where they become finely and closely pubescent as well as setulose. The labial palpi are usually simple, with slender third joint, but in the neotropical *Araeocnemis* have the third joint, singularly enlarged. The mentum is usually transverse, becoming especially modified only in the very remarkable genus *Platyprosopus.*

The elytral suture is abnormal in the Xantholini, and, to a much less marked degree, in the Araeocnemes and Metoponci, the inner edge of each elytron being widely and gradually beveled, so that in closing, one slips upon the other to a slight extent, leaving the summits of the beveled edges as two separate broadly arcuate lines, a formation which enables one to identify a Xantholinid at a glance, even without noticing the aberrant antennae. A number of subtribes have the elytral suture normal, however, such as the Othii, Diochi and those which follow in the table below. The neck is usually rather thick, and, although sometimes narrow, never becomes so extremely slender as in *Stilicus* and some other genera of the Paederini for example. The anterior and middle coxae are remarkably large and prominent as a rule, but the posterior have the exposed inner parts small and contiguous as usual. In many forms, such as the Hyptiomae, the middle coxae become flat on their exposed surface when in repose; they frequently extend from the median line to the sides of the body. The prosternum is short and not much produced in the middle under the coxae; its anterior margin is broadly and distinctly sinuate, except in *Platyprosopus* and *Hyptioma*, where it becomes truncate. The membrane thus exposed in the sinuation is partially covered by a complex arrangement of extruded corneous plates, the central large and broadly arcuate at tip, the lateral small and more extensile. These plates are undoubtedly connected in some way with the unusual flexility of the head; they appear to be wanting in the Paederini, where the exposed piece, when present at all, is much shorter and membranous or coriaceous in texture. The tarsi are remarkably uniform in structure and present nothing unusual; the anterior are undilated as a rule but become strongly dilated and densely pubescent beneath in certain genera, notably *Platyprosopus*, where they are also eccentric as in *Pinophilus*, in *Leptolinus* and *Notolinus* and one or two others of the Xantholini, in *Diochus* and the Othii.

The sexual characters at the ventral apex are singularly inconspicuous when we compare the tribe with many others, such as the Paederini, and the most notable sexual characters generally apply to the female and not the male. In the male of *Nematolinus* and *Hesperolinus*, for example, the sixth ventral is broadly rounded at tip, but in the female is either acutely angulate or produced in a slender spine, which, in *parcus* and one or two other species, extends well behind the extreme tip of the abdomen. The female characters of *Leptacinus* are also peculiar as noted below. In the Othii, however, the male frequently has the sixth segment more or less evidently sinuate at tip, and it is an invariable rule that the apex of the sixth ventral is less arcuate or less produced in the male than in the female, even when the actual difference of curvature is very slight, as in *Nudobius* and *Xantholinus*.

It is convenient to divide the tribe, as represented by the material that happens to be in my cabinet, into seven subtribal groups distinguished by the following characters:—

Prosternum emarginate anteriorly, the emargination partially filled by an apparently extrusive rounded corneous plate........................ 2

Prosternum transversely truncate anteriorly, without extrusive corneous plate; elytral suture fine, straight and normal; middle coxae contiguous; antennae less approximate on the front than in the Xantholini, nearly as in Othii and Diochi.................................... 8

2 — Antennae finely and densely pubescent from the fourth joint, not notably compressed.. 3

Antennae subglabrous, strongly compressed, approximate as in Xantholini 7

3 — Maxillary palpi glabrous, excepting a few sparse tactile bristles......4

Maxillary palpi minutely pubescent; antennae less approximate......... 6

4 — Labial palpi normal, the last joint more or less slender............. 5

Labial palpi with the last joint large and securiform; antennae approximate; neck slender; middle coxae very remotely separated, much smaller than usual; inner edge of the elytra usually less broadly beveled than in the Xantholini. Neotropical regions............***Araeocnemes**

5 — Antennae approximate on the frontal margin, the latter more or less feebly but apruptly advanced between them in the middle, forming a distinct epistoma; elytral suture always broadly beveled and abnormal; middle coxae distinctly separated as a rule................**Xantholini**

Antennae more widely separated, the frontal margin nearly truncate between them; elytral suture normal; middle coxae contiguous.....**Othii**

6 — Elytral suture normal; middle coxae contiguous; head much less developed than in any other subtribe, the antennae relatively distant at base...**Diochi**

7 — Antennae very approximate as in the Xantholini, the narrow epistoma between them much more produced, dorsally elevated and bilobed; elytral suture but slightly beveled, almost normal, the middle coxae contiguous...***Metoponci**

8 — Mentum normal, short and transverse; antennae as usual; body depressed, small in size.....................................***Hyptiomae**

Mentum with its coriaceous continuation triangular; antennae somewhat abnormal, the joints elongate and compressed; body moderately convex, very large in size..............................***Platyprosopi**

The subtribes foreign to America, as indicated by the asterisks, may be remarked upon as follows: —

Araeocnemes. — A few genera, composed of large and showy neotropical species, alone constitute this tribe. The principal genus has long been known under the name *Sterculia* Lap., but, as an important genus of plants has been designated for a still longer time by the same name, it seems advisable to change the zoological name, especially as we can do so without coining a new word, the *Araeocnemis*, of Nordmann, being synonymical with *Sterculia*.*

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* It would be ambiguous, for instance, if not altogether absurd, to speak of a *Sterculia lauta* being found under dead leaves in the shade of a *Sterculia americana*. Another example of the same kind is the well known Pselaphid genus *Reichenbachia*, and I would propose that this be changed to **Reichenbachius** to distinguish it from the *Reichenbachia* of the botanists.

The characters of the table have been drawn from a species of *Araeocnemis* of moderate size, which may be described as follows: —

Rather stout, with slender, elongate prothorax, brilliant blue-green in color with purplish reflection on the elytra and pronotum, which are polished and with rather coarse, sparse, impressed and evenly but irregularly distributed punctures, each of which bears a conspicuous stiff black hair; head oblong-elongate, relatively rather small though wider than the prothorax, parallel, with rounded basal angles, the upper surface throughout with coarse and very dense, longitudinally anastomozing punctures, the sides subinferiorly behind the eyes with a broad parallel-sided longitudinal line, which is acutely limited above and below, broadly, feebly concave and in great part impunctate, the punctures of the under surface coarse and conspicuous posteriorly but almost wanting anteriorly; antennae with the first three joints subglabrous, the next two coarsely punctate and setulose, the last six, and especially the last four, very minutely, densely pubescent, the penultimate slightly transverse and a little longer than the preceding joint; mandibles arcuate and convex externally, becoming narrowly grooved toward base only; they are broadly decussate in repose and much shorter than the head; prothorax narrow, anteriorly pointed from near the middle and impressed at each side toward base; elytra large, quadrate, nearly twice as wide as the prothorax, with the inner edge only very narrowly beveled, the line marking the summit of the bevel being, on each elytron, strongly elevated and cariniform. Length 18.0 mm.; width 4.5 mm. Panama.................................**lauta** n. sp.

This species cannot be identified with any of those described in the Biologia under the name *Sterculia*, and *Agrodes* Nord., and *Plochionocerus* Shp., are very different in facies though apparently belonging to the same subtribe.

Metoponci. — The genus *Metoponcus*, of Kraatz, is one of the most isolated of the tribe and is undoubtedly of full subtribal importance; I know of no associates for it at present. The genus appears to be peculiar to the more southern of the palaearctic faunal provinces, whence I have examples from Greece and Lenkoran. The body in *Metoponcus* is moderately slender, parallel and convex, nearly as in the genus *Gyrohypnus* of the Xantholini, but the head is remarkably elongate, parallel and rectilinear at the sides, the flanks behind the eyes not having two obtuse lines with a flattened area between them, as is generally the case in that tribe, but, on the under surface parallel and close to the sides, there is a remarkable deep groove, with which perhaps the lateral line of *Leptacinus* is homologous, and outside of which the lateral line of the head is acute and prominent inferiorly; above this line the surface is evenly convex through the flanks to the dorsal surface and without further irregularity. The gular sutures are single from the small triangle behind the mentum to the base, the neck scarcely a third as wide as the head, the third palpal joint elongate, obconical, the fourth small, slender and oblique and the mandibles are rather small, arcuate, each strongly unidentate within, convex externally, with a fine impressed longitudinal groove. The antennae are shorter than the head, broadly flattened, glabrous but with herissate setae and are wholly unique in the tribe. The prothorax and prosternum are nearly as in *Gyrohypnus*, but the bevel of the inner edges of the elytra is convex, rather narrow and not marked by a carina or elevated beading at its upper part. The tarsi are remarkably long and slender, with the basal joint much shorter than the second; the middle tarsi are notably longer than the tibiae.

A considerable number of neotropical species have been placed in *Metoponcus*, chiefly by Dr. Sharp, but they probably constitute several distinct genera, no one of which is exactly congeneric with the European *Metoponcus*, although *longiceps* Shp., may possibly form a genus of the subtribe Metoponci as here considered, on account of the peculiar form of the interantennal epistoma. The remarkable antennal structure of *Metoponcus*, which constitutes one of the most distinctive features of the present subtribe, has been unaccountably overlooked in describing these neotropical forms, some of which may enter *Oligolinus*, defined below to receive the *Metoponcus floridanus*, of LeConte, the antennae of which are certainly not Metoponcid.

Hyptiomae. — This subtribe is founded upon a single very small slender and strongly depressed parallel species, occurring in the Island of Cuba, which may be described as follows: —

Strongly depressed, parallel, pale testaceous in color, the legs and antennae also pale, the head blackish, moderately shining. Head subquadrate, behind the antennae somewhat wider than long, the sides parallel and nearly straight, the angles right, narrowly rounded; base transversely truncate; neck not quite half as wide as the head; antennae separated at base by fully two-fifths of the maximum width, rather slender, only slightly longer than the head, the basal joint scarcely longer than the next two combined, the second barely as long but rather thicker than the third, the latter more strongly narrowed at base and much shorter than the next two combined; epistoma very short, truncate; labrum transverse, bilobed, the lobes evenly rounded, the notch evenly and deeply sinuate; mandibles small, not grooved externally but with an acute subinferior external edge; maxillary palpi moderate, glabrous, sparsely setose, the third joint somewhat notably elongate, the fourth very small, aciculate and extremely oblique; mentum small, transverse; gular sutures very fine, straight and rapidly converging posteriorly to apical third, thence single to the base; flanks of the head evenly and strongly convex, unmodified; eyes well developed; punctures rather strongly impressed and distinct, somewhat sparse throughout, with a narrow impunctate dorsal line which seems to bifurcate anteriorly; frontal grooves wanting. Prothorax short, obtrapezoidal, scarcely as long as wide, obviously shorter and narrower than the head, the sides feebly arcuate, the angles obtuse but rather distinct; surface rather finely but deeply, closely and confusedly punctate, with a wide impunctate median line, which is well defined by close-set series and notably narrower toward base; side margin finely acute, extending to the apex though gradually deflexed anteriorly before the middle; below this a second fine carinal line, nearly parallel to and more abbreviated than the lower edge; prosternum well developed before the coxae, the latter somewhat narrower than usual, the posterior acute angulation approaching the mesosternum much closer than in any other genus, the emargination of the mesosternum very small, rounded, the anterior coxal cavities partially closed externally and posteriorly by a corneous piece not visible elsewhere in the tribe. Elytra longer than wide, one-half longer and nearly a third wider than the prothorax, minutely but deeply, very closely, evenly but irregularly punctured throughout, rather dull; suture very fine, simple. Abdomen slender, parallel, distinctly narrower than the elytra and similarly, though still more finely and less closely punctulate, more shining. Middle coxae more rounded and less elongate than usual, contiguous, extending to the sides of the body, flat inferiorly, with a large discal concavity in each. Legs short, the tarsi very short, stout and extremely compact, tapering from base to apex, the anterior not dilated. Male not known, the sixth ventral of the female evenly and subparabolically rounded from the sides near the base around the apex. Length 4.0 mm.; width 0.55 mm. Cuba (Havana), — C. F. Baker.

Hyptioma (n. gen.) **cubensis** n. sp.

There can be but little doubt that this very singular Xantholinid lives under bark, though I have no notes as to its habits from Mr. Baker. Its structural characters, and particularly its entire facies, indicate subtribal isolation at least.

Platyprosopi. — The very remarkable genus *Platyprosopus*, of the southern parts of the palaearctic province, is the only representative of this subtribe at present known. Its species are of large size, parallel and convex form, with the neck extremely wide and only feebly delimited from the head by shallow lateral impression of the occiput. The head behind the antennae is shorter than wide, rounded at the sides, which are not longitudinally modified behind the eyes; the latter are well developed in point of size and rather convex, but apparently unique, perhaps in the entire Staphylinidae, in having the facets wholly obsolete except in very limited number around the anterior part, the rest of the surface being densely opaque, evenly convex and with fine scattered punctules like those of the other parts of the cephalic surface. The antennae are more slender, elongate, loose and filiform than usual in the Xantholinini and have the outer joints elongate, obconical and compressed, the basal joint about as long as the next two combined. The labrum is short, transversely truncate, apparently with a feebly projecting median lobe, the mandibles large, arcuate, convex externally, with an acute edge toward base, the palpi short and thick, the three outer joints of the maxillary subequal in length, the last cylindric, obtuse at tip; gular sutures short, converging posteriorly but still narrowly separated where they attain a median tumorosity at the base of the head. The prothorax is wider than long, rather wider than the head, wider apically than basally, the sides evenly arcuate, the basal angles broadly rounded, the apical not rounded, the surface not strigilate but having very minute and irregularly scattered nude punctules throughout, the lateral edges more strongly beaded than in any other genus; hypomera rapidly descending; middle coxae contiguous, large, extending to the sides of the body. The legs are long and rather thick, the tarsi elongate, with the basal joint of the posterior longer than the next two combined, the anterior strongly dilated and twisted. The elytra have the suture fine and normal, without contiguous beading, and, at base, each is hollowed into a concave helicoidal polished surface, permitting of the easy motion of the broad prothorax upon them; externally this helicoidal surface is vertically and prominently carinate, this also being a unique feature. The punctuation of the elytra and abdomen is minute and very close-set, the pubescence short but conspicuous.

The species serving for this diagnosis is one sent me recently from Egypt by Mr. Reitter, under the name *beduinus* Nord. In spite of its conspicuous eyes it is probably virtually blind. It is evident, on considering the strongly and eccentrically dilated anterior tarsi and general facies, that *Platyprosopus* is a very aberrant member of the present tribe, forming one of its bonds with *Pinophilus*.

Subtribe **Xantholini.**

This subtribe of almost mundane distribution embraces by far the greater part of the tribe. From such evidence as is available its numerous genera appear to be clearly delimited and in no way opinionative, which suggests a comparatively great antiquity for the subtribe as a whole. It possesses this character in common with the Paederini and Pinophilini, in contrast with the Stenini and some other groups, which seem to be in a more decidedly mutative state at the present time. One of the most striking features of the subtribe under consideration and one by which its genera can always be recognized at a glance, is the very remarkable and almost unique form of the elytral suture, the double beveling giving the effect of gemination as explained in the table of subtribes. This character is found elsewhere only in the Aracocnemes and Metoponci, but to a much less developed degree. The middle coxae are more or less widely separated as a rule, sometimes very remotely so as in *Leptolinus*, but in *Idiolinus* they become contiguous, so that the contiguity of the coxae, which prompted LeConte to place the minute *floridanus* in *Metoponcus*, is therefore not necessarily a bar to its reception within the subtribe Xantholini. Those genera having a smooth pronotum, devoid of the medial dorsal series characterizing the majority, seem to be characteristic of the warmer parts of North and South America, and it is therefore rather surprising to find the European fauna possessed of a genus of this particular group, composed of several species wholly foreign to the new world, excepting one — the *Eulissus fulgidus*, of Fabricius,— which has been artificially introduced. The following twenty-four genera are differentiated and characterized principally by structure of the maxillary palpi, form of the side margin of the prothorax and of the gular sutures, structure of the basal part of the antennal funicle, degree of separation of the middle coxae and form of the anterior tarsi, the hind tarsi varying but slightly throughout. They may be briefly outlined as follows: —

Fourth joint of the maxillary palpi long, never very much shorter than the third; anterior tarsi always slender, subglabrous beneath............2

Fourth joint small, much shorter than the third, and, at base, conspicuously narrower, conical and acuminate or aciculate and usually more oblique...19

2 — Fourth joint stouter at base and less conspicuously narrower than the third..3

Fourth joint more slender, its base much narrower than the tip of the third joint; side margin of the prothorax as in *Xantholinus*...............16

3 — Pronotum without dorsal punctures; middle coxae always distinctly separated; gular sutures united.................................... 4

Pronotum with dorsal punctures which are always sparse and for the most part arranged in a few series.......................................10

4 — Second antennal joint much shorter than the third; side margin of the prothorax deflexed anteriorly from the middle or posterior thereto; species usually large in size...5

Second and third antennal joints equal, each slightly elongate but not as long as the next two combined, nearly as in *Xantholinus*, the thoracic side margin only feebly deflexed toward tip as in that genus..........9

5 — Neck nearly half as wide as the head...............................6

Neck narrow, about a fourth as wide as the head.......................8

6 — Antennae very small, with the basal joint relatively much elongated and fully two-thirds as long as the remainder; middle coxae rather small, narrow, very widely separated; body large, subimpunctate, generally metallic blue or green in color, the elytra with very few punctures, the abdomen distinctly though sparsely punctured; epistoma subcoriaceous and testaceous in color, separated from the front by a feeble transversely arcuate depression; labrum small, deeply sinuate at the middle; mandibles not impressed externally; maxillary palpi moderate, the fourth joint scarcely longer than the third, obliquely and obtusely acuminate only toward apex; under surface of the head flattened, the lateral margins but feebly prominent beneath, the sides

convex, not impressed, the basal angles rounded; median frontal grooves represented by feeble punctiform impressions at some distance behind the epistoma, the lateral oblique or ocular grooves short but more distinct; prosternum very short before the coxae; thoracic side margin gradually and evenly deflexed anteriorly from behind the middle, remaining rather distant from the lower margin even at apex; hind tarsi short and rather slender, with the first four joints regularly decreasing in length. Neotropical regions..................***Dinolinus**

Antennae normal, as long as the head or longer, the basal joint much less than half as long as the remainder; middle coxae larger and less remotely separated; body much smaller in size and of more slender form, the side margin of the prothorax strongly deflexed anteriorly from behind the middle, becoming very narrowly separated from the lower margin toward apex; fourth joint of the maxillary palpi spindle-form, distinctly longer than the third, obtusely narrowed only toward tip; mandibles unimpressed externally.............................. 7

7 — Epistoma rather large, parallel-sided, with its apex truncate and its upper surface impressed; middle pair of frontal grooves short, double; punctures of the head moderately coarse, normal, not forming grooves, the sides evenly convex from the upper to the lower surface, the basal angles evenly rounded; elytra not punctured in definite series. Mexico. ***Saurohypnus**

Epistoma small, gradually enlarged from base to the truncate apex, the two duplex grooves of the front long and conspicuous, the oblique ocular grooves short but deep; punctures of the head extremely coarse and deep, subcoalescing into longitudinal grooves toward and on the flanks, the latter otherwise evenly convex from the upper to the under surface, the basal angles, however, not evenly rounded but obtusely subprominent; elytra each with a distinct medial series of punctures. Europe, — also occurring in America by accidental introduction. **Eulissus**

8 — Body much more depressed, polished, subimpunctate, the head truncate at base with the angles not rounded, though scarcely at all prominent, the mandibles not grooved externally, the epistoma very short, broadly truncate at tip, the median pair of frontal grooves long, deep, strongly converging posteriorly, the median line thence deeply grooved almost to the base, the short subsidiary grooves outside of the median pair at apex fine and diverging as in the two preceding genera; ocular grooves very coarse, deep, longitudinal, extending almost half way to the base, impressed; sides of the head obliquely flattened and with fine punctuation, the under surface flat, with coarse impressed lateral grooves which are bounded externally by a tumid line; last joint of the maxillary palpi scarcely as long as the third, spindle-form, rather narrower than usual, parallel, becoming obtusely acuminate only toward tip; elytra not distinctly punctured; side margins of the prothorax rather abruptly deflexed anteriorly from somewhat before the middle, coming very close to the lower margin at apex. Central America. ***Homalolinus**

9 — Body rather stout, parallel and convex, much smaller in size, the head broadly, feebly arcuate at base with the angles narrowly rounded, im-

punctate, the sides somewhat flattened, with a large setigerous fovea posteriorly just before the basal angles, the flattened part bounded beneath by a feebly prominent longitudinal ridge; epistoma small, short, truncate; inner frontal grooves long but fine, parallel, the oblique ocular grooves coarse, deep and well developed; mandibles not grooved externally; fourth palpal joint much longer than the third, rather strongly acuminate in apical half; elytra subserially and distinctly punctured. Central America........................***Xanthohypnus**

10 — Side margin of the prothorax rapidly deflexed anteriorly from near the middle and united with the lower margin somewhat before the middle; sides of the head not modified behind the eyes, the basal angles rounded; gular sutures united; maxillary palpi with the fourth joint about equal in length to the third, rather obtusely accuminate toward tip; mandibles narrowly and deeply grooved externally; antennae with the second and third joints equal or subequal, each but slightly elongate and somewhat rounded; median pair of frontal grooves long and strong, feebly converging, the oblique ocular grooves short and feeble; punctures normal; neck two-fifths as wide as the head; middle coxae well separated; basal joint of the hind tarsi shorter than the second; body rather large in size. Europe and North America.............**Nudobius**

Side margin of the prothorax gradually and only feebly deflexed anteriorly, remaining distant from the lower margin to the apex; basal angles of the head rounded as a rule; mandibles grooved externally..........11

11 — Middle coxae distinctly separated as usual; neck two-fifths as wide as the head..12

Middle coxae contiguous; neck very slightly narrower; third antennal joint abnormal...15

12 — Second and third antennal joints equal in length or nearly so, each rather distinctly elongate but shorter than the fourth and fifth combined...13

Second antennal joint slightly elongated, much shorter than the third, the latter evenly obconical and about equal in length to the next two combined...14

13 — Maxillary palpi of the usual form, elongate, the fourth joint spindleform, acuminate only toward tip, as long as the third joint or nearly so; gular sutures united; epistoma minute, truncate at tip; median frontal grooves strong, slightly converging, the ocular feeble; punctures coarse, normal; basal joint of the hind tarsi as long as the second or nearly so; species rather large. Europe and Pacific coast of America..**Xantholinus**

Maxillary palpi normally slender but with the third joint shorter than in *Xantholinus*, the fourth very much longer than the third and acutely conical; second and third antennal joints relatively smaller, the former frequently slightly the larger of the two and more rounded than in *Xantholinus;* epistoma very small, truncate; median frontal grooves moderate, parallel, the oblique ocular rather distinct; punctures normal but less coarse than in *Xantholinus;* gular sutures arcuately converging, becoming extremely approximate only behind the middle; first four joints of the hind tarsi decreasing very gradually in length; body generally smaller and more slender than in *Xantholinus*. Palaearctic and Nearctic regions...**Gyrohypnus**

Maxillary palpi shorter and stouter, compressed, the very short, obtusely conical fourth joint evidently shorter than the third; antennae nearly as in *Xantholinus*, the epistoma shorter but much broader, truncate; median frontal grooves strong, parallel, the ocular subobsolete; gular sutures arcuately converging, fine, becoming very approximate behind the middle; head rounded at base; punctures extremely fine and sparse throughout, the integuments highly polished; hind tarsi with the two basal joints equal. North America (Sonoran regions).... **Xestolinus**

14—Body moderately large, the head well developed, nearly as in *Xantholinus* and larger than in *Gyrohypnus*, the gular sutures united from well before the middle to the base; epistoma small, truncate; maxillary palpi with the third joint shorter than in *Xantholinus*, the fourth much longer, stouter than in *Gyrohypnus* and acuminate only in apical half; median frontal grooves well developed, parallel, the ocular grooves obsolete and represented by feeble depressions near the eyes; punctures normal, rather coarse; hind tarsi with the first two joints equal. Subtropical Altantic North America........................ **Lissohypnus**

15 — Body moderately stout and rather smaller, the elytra less developed than usual, the head broadly rounded basally, the eyes rather small; antennae unusually stout, the third joint as long as the next two combined, constricted toward base and strongly dilated apically, pedunculate and much longer than the second; maxillary palpi with the third and fourth joints elongate, the latter unusually slender for the present group and gradually narrowed to the obtuse apex almost throughout, somewhat shorter than the third; gular sutures fine, arcuately converging, becoming very approximate toward base; median frontal and oblique ocular grooves fine, subequal in length and visibility; punctures fine and sparse, the integuments polished; hind tarsi more slender and elongate than usual, the first joint scarcely as long as the second. Europe.. ***Idiolinus**

16 — Pronotal punctures as in the preceding genera, very sparse and disposed in a few more or less irregular series.................................17

Pronotal punctures confused in arrangement and usually much more numerous..18

17 — Frontal grooves very long, deep and conspicuous, the oblique ocular grooves as long and conspicuous as the median; fourth palpal joint subcylindric, very slender, usually quite distinctly shorter than the third and only moderately oblique in insertion; mandibles grooved externally as usual; gular sutures uniting just behind the middle and thence coarse and single to the base; under surface of the head longitudinally impressed near the sides, the impression bounded externally by an obtusely rounded ridge; second antennal joint longer and thicker than the third, the outer joints only moderately thick as in *Xantholinus;* tarsi obviously thickened toward base; punctures of the head and pronotum very few in number but remarkably coarse. Palaearctic and Nearctic regions.. **Leptacinus**

Frontal grooves shorter and finer, the oblique ocular shorter and much fainter than the median; antennae similar; fourth palpal joint equally slender but more conical, slightly shorter to somewhat longer than the third and strongly oblique in insertion; gular sutures finer, arcuate, becoming very approximate but generally not quite united at base; under surface without a longitudinal impression at the sides, the latter obtusely subprominent inferiorly due simply to the flattening of the general under surface; tarsi more slender and filiform; punctures of the head and pronotum much less coarse, the latter more numerous in the series. Palaearctic and Nearctic regions................**Leptacinodes**

18 — Antennae nearly as in *Leptacinus*, the second joint visibly longer but scarcely thicker than the third, both slightly elongate; fourth palpal joint long, slender, somewhat longer than the third as a rule but conical and gradually, acutely pointed; gular sutures fine, arcuate, uniting near the base; sides of the head not modified; frontal grooves rather short, moderately distinct, subparallel, the ocular grooves wholly obsolete; punctures only moderately coarse but very numerous on the head and pronotum; species rather small, similar in size and form to *Leptacinodes* and rather smaller as a rule than in *Leptacinus*. Nearctic regions..**Stictolinus**

Antennae well developed, the second joint much elongated, nearly equaling the next three combined, the third about equally slender, slightly elongate, the outer joints stouter than in *Leptacinus* and more compactly joined; fourth palpal joint very slender, aciculate and oblique, as long as the preceding or nearly so; gular sutures very fine, arcuate, most approximate at base, where they are still distinctly separated; sides of the head broadly convex, unmodified, the basal angles broadly rounded; neck slightly more than a third as wide as the head, nearly as in *Stictolinus;* median pair of frontal grooves short and almost completely obsolete, the ocular grooves very oblique, deep and conspicuous, departing from the general rule; punctures of the head and pronotum fine and rather sparse, very inconspicuous; body very small, slender, convex and parallel, the abdomen convex and more strongly sculptured than usual; legs slender, the tarsi filiform. Pacific coast of America

Habrolinus

19 — Anterior tarsi slender and undilated, glabrous beneath or with a few sparse bristles; side margins of the prothorax and hypomera as in *Xantholinus*..20

Anterior tarsi broadly dilated, especially in the male, densely clothed beneath with white papillose pubescence; side margins of the prothorax distinct throughout, these and the hypomera as in *Gyrohypnus* and related genera; pronotum with dorsal series, the surface thence anterolaterally with irregularly scattered and very sparse punctures; middle coxae more or less narrowly separated; body polished, with distinct sparse punctures, the head above and beneath and pronotum minutely strigilate in transverse wavy lines or with some modification of this sculpture; gular sutures feebly arcuate, becoming confluent at or slightly behind the middle; sides of the head scarcely at all modified, almost evenly convex, the punctures generally sparser along the middle of the convexity; antennae moderate, only slightly thickened distally, the third joint generally a little longer than the second; neck about two-fifths as wide as the head; tibiae spinulose as usual......................25

Anterior tarsi broadly dilated in both sexes and clothed densely beneaht with spongy pubescence; lateral bead of the prothorax only visible toward base, wholly obliterated anteriorly........................26

20 — Prosternum shorter and less developed before the coxae, its posterior margin broadly angulate as usual, the angulation cuspidiform; head never more than feebly modified at the sides, the basal angles rounded 21

Prosternum larger before the coxae, arcuato-truncate behind under the latter, its surface evenly and feebly convex throughout and wholly devoid of carina at any part, the hypomera not inwardly dilated anteriorly; head with an obtusely rounded, polished and impunctate longitudinal line from the eyes posteriorly as in *Hesperolinus* 24

21 — Prosternum not carinate, somewhat narrowed anteriorly by the inwardly dilated hypomera; basal joint of the hind tarsi longer than the second; antennae stouter than usual and more compact toward tip, with the basal joint relatively much longer, the punctuation fine..........22

Prosternum carinate along the middle, not narrowed anteriorly by an inward development of the hypomera; basal joint of the hind tarsi about equal in length to the second; antennae never more than moderately stout...23

22—Anterior angles of the prothorax obsolete nearly as in *Habrolinus*, broadly rounded, the sides subparallel; body smaller and extremely slender; antennae somewhat as in *Habrolinus*, the second joint slender and unusually elongate, longer than the next two combined, the third obtrapezoidal and slightly longer than wide, the outer joints very compact and much thickened, the tenth two and one-half times as wide as long; palpi nearly as in *Lithocharodes*, the very oblique fourth joint extremely slender, aciculate and two-thirds as long as the third; inner pair of frontal grooves short, broadly and feebly impressed, parallel and very indistinct, the ocular obsolete and represented by a small rounded punctiform depression at the inner margin of the eyes; gular sutures very fine, feebly, evenly arcuate, gradually and feebly converging throughout to the base, where they are most approximate but still distinctly separated; legs slender. Nearctic Atlantic regions.
Nematolinus

Anterior angles of the prothorax rather distinct, the sides converging thence to the base; second antennal joint but little longer than the third, both distinctly elongated, the third equaling the fourth and fifth combined; third palpal joint only moderately elongate, the fourth small, slender, acutely conical, oblique and rather more than half as long as the third; gular sutures fine, approaching each other to the middle or before the latter, and thence parallel and extremely approximate to the base; eyes moderate; median pair of frontal grooves fine, rather short and parallel, the oblique ocular subobsolete; neck but little more than a fourth as wide as the head; body only moderately slender. Tropical and Subtropical Atlantic North and South America............**Lithocharodes**

23 — Body larger as a rule than in the two preceding genera, the head well developed, the third joint of the maxillary palpi elongate, enlarged distally, the fourth small, generally about one-half as long as the third, slender, conical and oblique; gular sutures arcuate, becoming extremely approximate from rather before the middle to the base; sculp-

ture stronger than in *Leiolinus;* antennae moderately thick, the outer joints moderately transverse and somewhat compactly joined, the second and third more or less distinctly elongate and equal or nearly so, each notably narrower and longer than the fourth; median frontal grooves short, feeble, subparallel and not very conspicuous, the oblique ocular grooves subobsolete or very feeble. Nearctic Pacific coast. **Hesperolinus**

24 — Body still larger than in *Hesperolinus;* hind tarsi with the first two joints equal in length; punctuation of the head and pronotum very fine and somewhat sparse, the former with the basal angles broadly rounded; eyes small; frontal grooves short but broadly impressed and distinct, arcuately converging, the oblique ocular grooves shorter, straight and rather distinctly impressed; antennae longer than usual and loose, but little enlarged apically, the second and third joints equal, more or less elongate and generally narrower though perceptibly longer than the fourth; third palpal joint much elongated, the fourth very short, only slightly oblique, rather slender but obtusely subconical; gular sutures very fine, arcuate, becoming extremely approximate but not united from before the middle; tarsi very slender, filiform. Sonoran regions of America...**Leiolinus**

25 — Frontal grooves long and deeply impressed; fourth joint of the maxillary palpi slender, aciculate, about three-fourths as long as the third; labrum deeply emarginate; dorsal series of the pronotum always regular and composed of about six punctures; hind tarsi with the first four joints subequal, each but little longer than wide, the fifth about as long as the three preceding combined. South Africa............***Notolinus**

Frontal grooves always very feeble and usually much shorter; fourth joint of the maxillary palpi shorter, strongly conical, generally but little more than half as long as the third; labrum less emarginate; dorsal series of the pronotum irregular and composed of a greater number of punctures; hind tarsi slightly more elongate, the first two or three joints much longer than wide and decreasing uniformly in length. South Africa...***Notolinopsis**

26 — Body moderately convex and slender, parallel, not very coarsely but densely punctured, the punctures of the elytra arranged without order; head oblong, rather depressed, not modified at the sides, the basal angles rounded; median frontal grooves obsolete, represented by feeble cariniform converging lines, the ocular grooves wholly obsolete; eyes small; antennae well developed, the basal joint distinctly more than half as long as the remainder, the outer joints only moderately thickened, the second and third equal in length, much elongated, each somewhat longer than the fourth and fifth combined; maxillary palpi unusually elongate, the fourth joint small, oblique, slender and aciculate; gular sutures uniting at a short distance behind the oral cavity and thence continuing as a very fine single line to the base; neck unusually slender, about a fifth as wide as the head; prosternum long and well developed before the coxae, the surface almost evenly and feebly convex, the hind margin cusped at the middle as usual; hind tarsi moderately slender, the basal joint slightly longer than the second; middle

coxae more widely separated than usual. Palaearctic and Nearctic Atlantic regions...**Leptolinus**

The two following genera are attached provisionally to the Xantholini. They are founded upon the original and wholly inadequate descriptions of Le Conte and consequentlymay be greatly out of place. My only excuse for publishing them at this time is because their type species cannot be assigned satisfactorily to any of the other genera thus far proposed: —

Body very minute, the palpi, antennae and front tarsi as in *Leptolinus;* head rather convex, the base truncate with the angles narrowly rounded; punctures of the head and pronotum small in size, sparsely scattered; middle coxae not examined. Nearctic Atlantic regions. [= *Leptolinus* Lec. nec Kr.]..**Microlinus**

Body minute, subcylindric; head convex, narrowed in front, the base truncate, the surface distinctly but not densely punctate toward the sides; antennae somewhat longer than the head, with the outer joints gradually much thickened; maxillary palpi with the fourth joint very small, acicular; middle coxae contiguous; front tarsi not dilated; prothorax distinctly though not densely punctured, with a broad smooth dorsal line; sutural "stria" of the elytra obsolete. Florida. [= *Metoponcus* Lec. nec Kr.]..**Oligolinus**

It will be noted that the genera of the above table from *Dinolinus* to *Xanthohypnus*, have the pronotum smooth and wholly devoid of the dorsal series of punctures, that those from *Nudobius* to *Leptacinodes* have some sparse dorsal punctures arranged for the greater part in a few more or less irregular series, and those from *Stictolinus* to *Leptolinus* have the pronotal punctures confused throughout the surface, except along a rather wide smooth median line and more close-set as a rule, except in the South African *Notolinus* and *Notolinopsis.* The significance of this pronotal sculpture is shown in many ways, as for example in the mandibles, those genera without dorsal punctures having the mandibles convex and unmodified externally, while those with dorsal punctuation, embracing all the other genera of the table, have them deeply grooved. The importance of this mandibular character, which is thus correlated with the absence of dorsal punctuation, will be recognized at once. The foreign genera indicated by asterisks in the table may be referred to as follows: —

DINOLINUS n. gen. — This genus is founded upon the large and brilliant blue-green polished species described by Erichson under the name *Xantholinus chalybeus.* The Mexican examples before me do not depart enough from Erichson's description of the Brazilian type to warrant separation without actual comparison, although there are probably divergencies of at least a varietal nature in a species of such wide distribution. The genus *Dinolinus* will apparently include also the *Xantholinus rutilus* of Perty.

SAUROHYPNUS Shp. — Although closely allied to *Eulissus*, differing principally in the formation of the labrum and epistoma, rather more widely separated antennae and system of cephalic and elytral sculpture, it seems apparent that these distinctive characters constitute a necessity for generic separation. *Saurohypnus* is apparently confined to the elevated regions of northern and central Mexico and is composed of moderately large, slender and convex species. It is greatly out of place in the systematic arrangement adopted in the Biologia. The only species actually known to me in nature may be described as follows: —

Parallel, rather strongly convex, polished, black, the palpi, entire elytra, apical half of the fifth and entire sixth ventrals, rufous, the legs and antennae piceous-black with the tarsi pale; head large, oblong, behind the antennae but little longer than wide, parallel and nearly straight at the sides, the basal angles broadly rounded; punctures rather coarse and close-set throughout the upper surface, without an impunctate median line and having a very large puncture above each eye; sides wholly unmodified and evenly convex; under surface rather coarsely, moderately closely punctate throughout, the punctures — like those of the upper surface — mingled with smaller punctures and somewhat elongate in form; antennae but little longer than the head, the penultimate joint one-half wider than long; mandibles moderately thick, arcuate, convex and wholly devoid of groove externally; prothorax two-fifths longer than wide, four-fifths as wide as the head, the apical angles scarcely at all rounded, the sides distinctly converging posteriorly throughout, feebly sinuate behind the middle; disk having numerous punctures toward the extreme lateral margins, a group of three large punctures near each apical angle, from which several smaller ones stream posteriorly in a short longitudinal line, and others scattered along the oblique apical margins; elytra longer than wide, parallel, as long as the prothorax and distinctly wider but not quite as wide as the head, the punctures distinct, rather close-set and only feebly sublinear in arrangement throughout, with the usual smooth polished line along the summit of the deflexed flanks; abdomen parallel, narrower than the elytra, distinctly and rather sparsely punctured throughout. Length 11.0 mm.; width 1.4 mm. Mexico (Guanajuato),— Dr. Dugès. **dugesi** n. sp.

This species, sent me many years ago, appears to differ from *scutellaris*, the type of the genus, in having the tip of the abdomen red and in its somewhat smaller size. The scutellum has five or six coarse close-set punctures as in *scutellaris*.

HOMALOLINUS Shp. — This genus comprises a number of neotropical species of very depressed form and rather large size, living under the bark of dead trees. The species serving as the type of the description given in the table may be described as follows: —

Elongate, depressed, parallel, polished, deep black throughout, the entire fifth and sixth abdominal segments rufous, the legs black, with the tarsi rufous though becoming blackish toward base, the antennae black or blackish, with the pubescence cinereous; head behind the antennae but little longer than wide, impunctate, except a transverse line of punctures at the extreme base, with a median canaliculation bifurcating anteriorly and a short deep groove at each side; sides nearly straight, parallel, the basal angles but slightly more than right and not at all rounded; flanks behind the eyes rather finely and densely punctate, this punctured area not at all definitely limited above or below; under surface impunctate, except near the deep lateral longitudinal grooves; prothorax much shorter than the head and three-fourths as wide, the apical angles rounded, the sides converging posteriorly throughout, sinuate just behind the apical angles; elytra longer than wide, with diverging sides, about as long as the prothorax, toward apex distinctly wider, impunctate; abdomen evidently narrower than the elytra, parallel, sparsely punctate toward the sides. Length 14.8 mm.; width 2.0 mm. Guatemala, — G. W. Bock.................... **atronitens** n. sp.

Resembles the Colombian *canaliculatus* Er., the type of the genus, but larger, with the entire fifth ventral rufous and differing in several other characters.

XANTHOHYPNUS n. gen. — The type of this genus is the very isolated species described by Dr. Sharp (Biol. Cent. Amer., Vol. 1, Pt. 2, p. 476), under the name *Xantholinus strigiceps*. It is deep black in color and of singularly compact, parallel and convex form. The short longitudinal scratches toward the sides of the head, which become still more distinct and close-set throughout the entire under surface, seem to be peculiar to this particular generic type and I know of no other species which can be associated with it at present. The original description states that the prothorax has three punctures at each side near the "posterior" angles;—anterior angles was the expression evidently intended by the author.

IDIOLINUS n. gen. — That the true generic status of the *Xantholinus crassicornis*, of Hochhuth, should have been overlooked thus far by European observers, seems rather unaccountable, for it constitutes one of the most isolated genera among the allies of *Xantholinus*, as shown by the contiguous middle coxae and abnormal antennae. I am unable to state at present whether other described European species can enter the genus or not, the diagnosis of the table having been taken from two specimens of *crassicornis*, recently sent to me by Mr. Reitter.

NOTOLINUS n. gen. — This genus and the following constitute the most abundant type of South African Staphylinidae and are both represented by very numerous species, the nine that I collected in a few weeks within seventy-five miles of Cape Town in 1882, being probably only a small proportion of those occurring there. The two genera resemble each other somewhat strongly in outward habitus, which differs marvelously little from that of some common *Gyrohypni*, such as *hamatus*, though on closer examination the palpi and widely dilated tarsi, in connection with type of sculpture, prove them to be wholly isolated and a peculiar type developed in the southern regions of Africa. The four species before me may be described as follows: —

Head less elongate, coarsely, very sparsely punctured, distinctly enlarged basally, with broadly rounded basal angles; species of larger size.... 2

Head narrower and more elongate, parallel at the sides, with rather less broadly rounded basal angles and smaller, though moderately coarse and equally sparse punctures; body usually much smaller in size and more slender in form... 3

2 — Stout, parallel, rather convex, polished, black, the anterior parts with feeble bronze reflection, the abdomen slightly picescent; legs and antennae blackish-piceous, the tarsi paler; elytra slightly paler along the apical margin; head behind the antennae barely as long as wide; frontal

grooves slightly converging, the ocular represented in great part by a large puncture above each eye; vertex broadly impunctate along the middle; prothorax only about a fifth longer than wide, narrower than the head, the anterior angles rounded; sides only very slightly converging, feebly sinuate toward the middle, the base unusually broad, rounded, only slightly narrower than the base of the elytra, the serial punctures coarse; elytra but little longer than wide, a little longer than the prothorax, wider than the latter and somewhat wider than the head, subparallel; punctures rather strong and sparse, irregular, with two partial series externally and a smooth line along the summit of the flanks and thence moderately closely, irregularly punctured to the lower margin; abdomen only slightly narrower than the elytra, very minutely strigilate, finely, sparsely punctulate, with a narrow median impunctate area. Length 7.5 mm.; width 1.18 mm. Cape Town.
grossulus n. sp.

Stout but less so than the preceding, similar in coloration, except that the black is not bronzed and the elytra are pale luteo-flavate, becoming gradually and increasingly infumate with blackish-piceous from about apical third or fourth to the base; head convex, behind the antennae as long as wide, the frontal grooves converging as in *grossulus* and similar otherwise; prothorax a little narrower, more elongate and more strongly narrowed from the rounded apical angles to the base, which is rounded and very distinctly narrower than the base of the elytra, the sides nearly straight, the serial punctures strong; elytra slightly elongate, subparallel, distinctly wider than the prothorax, as long as the latter in the female but slightly shorter in the male, much wider than the head in the former but not so obviously in the latter sex, the punctuation nearly similar to that of *grossulus*, though perhaps sparser as a whole and rather more condensed along the suture; abdomen narrower, distinctly narrower than the elytra, similiarly punctured. Length 6.5–7.25 mm.; width 0.9–1.0 mm. Wellington......................**fumipennis** n. sp.

8 — Body more slender than in the two preceding species, black, shining, the elytra generally black, sometimes paler; the legs and antennae blackish-piceous, the tarsi paler; head behind the antennae as long as wide in the male, smaller and somewhat more elongate in the female, distinctly though not so coarsely, very remotely punctate, with the usual broad smooth area along the middle, the under surface more finely, very sparsely punctate; prothorax elongate, one-third to two-fifths longer than wide, fully as wide as the head in the female, and nearly as wide in the male, the apical angles broadly rounded, the sides only very feebly converging and nearly straight thence to the base; punctures of the dorsal series strong; elytra quadrate in the male, somewhat elongate in the female, more distinctly wider than the prothorax in the latter, where the two are equal in length, the elytra relatively shorter in the male; punctures rather numerous and coarse, forming two irregular series externally except toward tip; abdomen rather distinctly narrower than the elytra, finely, sparsely punctulate, except along the middle as usual. Length 5.8–6.2 mm.; width 0.78–0.85 mm. Cape Town and Wellington......................................**hottentotus** Sachse

Body equally slender and still smaller, dark piceous to blackish in color, the elytra always somewhat paler and piceo-rufous; legs and antennae blackish-piceous, the tarsi paler; head behind the antennae quadrate, very sparsely and rather finely punctured toward the sides, the eyes moderately developed and slightly convex as usual; under surface finely, sparsely punctate; prothorax as wide as the head to a little wider, much less elongate than in the preceding and with the sides more strongly converging from the broadly rounded apical angles and nearly straight, about a fourth longer than wide, the serial punctures moderately coarse; elytra equal in length to the prothorax to distinctly longer, slightly wider than the latter and much wider than the head, punctured nearly as in *hottentotus* but still more sparsely; abdomen slightly narrower than the elytra, sparsely punctulate as usual. Length 4.3–4.8 mm.; width 0.65-0.7 mm. Cape Town and Wellington................**parvus** n. sp.

Of *hottentotus* I have a female from Cape Town and a male from Wellington, the former satisfying the original description in being black throughout, but the latter, while differing in its stouter form, broader head, shorter elytra and other characters due to sex, has the elytra decidedly pale piceo-rufous and more strongly punctate. There may be two closely allied species involved but the material before me is too limited to permit of decision on this point at present. I have been unable to recognize the *Xantholinus fallax*, of Sachse, this species being black, polished, with the prothorax almost parallel and subequal in length to the elytra.

NOTOLINOPSIS n. gen. — The resemblance between this genus and the last is very noticeable and the similarity is augmented by some of the principal structural peculiarities of *Notolinus*, such as general minute surface sculpture, widely dilated anterior tarsi and other characters, but the form of the fourth palpal joint and frontal grooves differs so greatly as to leave but little doubt of the generic difference, especially in conjunction with certain constant differences in the punctuation, the series of the pronotum, for example, never being regular as they are in *Notolinus*, but always composed of more numerous punctures, which are irregularly disposed in a longitudinal direction throughout the length in the position occupied by the regular series of *Notolinus*, and the punctures of the elytra are more numerous and evenly, though irregularly, scattered throughout, without sublateral series. In addition, the surface of the head beneath is flatter in *Notolinus* and rather more abruptly limited at the sides, and the labrum appears to differ, being less deeply emarginate or less strongly bilobed in *Notolinopsis*. The species in my cabinet number five at present and they may be defined as follows: —

Frontal grooves long, though feebly impressed extending well behind the transverse line limiting the eyes anteriorly. Body larger, moderately slender and convex, shining, black, the abdomen slightly picescent, the elytra not paler; legs and antennae blackish-piceous, the tarsi pale; head of the female behind the antennae somewhat longer than wide, the eyes rather small, the punctures coarse and very remotely scattered toward the sides; prothorax a fourth longer than wide, scarcely narrower than the head, the anterior angles narrowly rounded, the sides very distinctly converging and nearly straight thence to the base; dorsal punctures strong, very sparsely disposed antero-laterally; elytra ample, rather longer than wide, as long as the prothorax and distinctly wider, slightly wider than the head, the sides diverging from the base; punctures sparse but strong, evenly distributed; abdomen parallel, narrower than the elytra, finely, sparsely punctulate except along the middle. Length 7.0 mm; width 1.05 mm. Wellington.....**incultus** n. sp.

Frontal grooves very short as well as feeble; species smaller in size.......2

2 — Elytra ample, as long as the prothorax, or, in the male, but little shorter, the sides diverging from the base..............................3

Elytra much shorter than the prothorax in both sexes, the sides sensibly diverging from the base..4

3 — Body larger and stouter, polished, rufo-piceous in color, the elytra somewhat paler, the antennae fuscous, the legs pale rufo-piceous; head behind the antennae about as long as wide, dilated toward base in the male, smaller and parallel in the female, the eyes relatively smaller in the former, the punctures coarse and sparse toward the sides; third antennal joint but slightly longer than the second, the under surface finely and sparsely punctate toward the sides, impunctate toward the median line and base; prothorax large, especially in the male, as wide as the head in both sexes, a third to two-fifths longer than wide, the apical angles very distinct and narrowly rounded, the sides thence strongly converging to the base and almost straight, the puncture very sparse as usual and only moderately coarse; elytra rather longer than wide much wider than the head in the female and slightly so in the male, a little shorter than the prothorax in the latter but equal in the female, the punctures rather close-set throughout; abdomen finely, sparsely punctulate as usual. Length 5.8 mm; width 0.9 mm. Wellington.
latitarsis n. sp.

Body very slender, black, the elytra dark rufo-piceous, the antennae fuscous, the legs blackish-piceous, with the tarsi pale; head narrower, behind the antennae longer than wide, parallel and straight at the sides, the punctures rather small and widely scattered toward the sides, the under surface finely, sparsely punctate throughout except toward base; antennae as in *latitarsis* though more slender; prothorax scarcely as wide as the head, two-fifths longer than wide, the anterior angles rather broadly rounded, the sides thence distinctly converging and broadly, medially sinuate to the base; punctures sparse, fine and rather feeble; elytra longer than wide, as long as the prothorax and slightly wider, the punctures rather fine but close-set throughout, except along the upper part of the deflexed flanks, where there is the usual polished impunctate line; abdomen nearly as wide as the elytra, inconspicuously punctulate as usual. Length 5.0 mm.; width 0.73 mm. Wellington. **languidus** n. sp.

4 — Form stout, parallel, shining, dark rufo-piceous throughout, the legs and antennae pale; head in the male large, gradually dilated toward base, with the eyes small, in the female a little narrower, parallel, with the eyes larger, the basal angles unusually broadly rounded in both sexes, the punctures very fine, remotely scattered toward the sides; third antennal joint notably longer than the second; prothorax large in the male, much smaller and shorter in the female, scarcely narrower than the head in the former, distinctly so in the latter, a fourth to nearly two-fifths longer than wide, the sides strongly converging and the apical angles rather broadly rounded, the punctures rather fine and sparse but distinct; elytra scarcely as long as wide, much shorter and slightly wider than the prothorax, the punctures rather fine but strong and close-set throughout; abdomen broader than usual, about equal in width to the elytra, finely, sparsely punctulate. Length 5.9 mm.; width 0.9 mm. Cape Town.......................................**capensis** n. sp.

Form moderately stout, parallel, shining, smaller in size, rufo-piceous throughout, the legs and antennae paler; head behind the antennae rather longer than wide, parallel, the basal angles moderately rounded; punctures fine and somewhat close-set laterally, wanting almost throughout the width anteriorly, the antennae nearly as in the preceding species; prothorax two-fifths longer than wide, equal in width to the head, the apex subtruncate, the apical angles very distinct and only narrowly rounded, the sides rather strongly converging; base subcircularly rounded, the punctures fine and sparse; elytra and abdomen nearly as in *capensis*. Length 5.6 mm.; width 0.8 mm. Cape Town. **diligens** n. sp.

The more sharply angulate basal angles of the head and apical angles of the prothorax and general form of the head serve to distinguish *diligens* from *capensis*, the type of the former being apparently a male.

Eulissus Mann.

The genus *Eulissus* appears to be the only one devoid of dorsal pronotal series of punctures known thus far to the palaearctic fauna. These structural types are numerous in the warmer parts of North and South America and *Eulissus* is approached most closely perhaps by the genus *Saurohypnus*, of Sharp. The pronotum is not wholly sculptureless in

Eulissus, there being a deep arcuate punctured groove near each side, a coarse setigerous puncture anteriorly at lateral fourth and another near each basal angle. The extremely coarse, deep and sparse punctures of the head, aggregated into punctured grooves laterally, seems to be a character peculiar to *Eulissus*. The elytra have each a medial series of distinct punctures and are otherwise wholly sculptureless, except in a broad line along the elytral suture and on the deflexed flanks, where the punctures are irregularly arranged. Dr. Sharp was greatly in error in uniting *Eulissus* with *Xantholinus*, as the two genera are only related in the characters of the subtribe. This may be appreciated at once on observing the structure of the mandibles in the two genera. Our single species may be briefly described as follows: —

Moderately stout and convex, parallel, highly polished, deep black, the elytra throughout pale rufous, the scutellum black; antennae ferruginous, with the first three joints black, the legs piceous-black, the tarsi paler; head rather longer than wide, parallel and very feebly arcuate at the sides, the base broadly arcuate, with the angles obtuse though scarcely rounded; antennae but little longer than the head; prothorax somewhat shorter and distinctly narrower than the head, elongate, the anterior angles distinct, the sides converging thence to the base, becoming broadly and feebly sinuate posteriorly; elytra slightly shorter and wider than the prothorax but not quite as wide as the head; abdomen finely, rather sparsely punctured, less distinctly in a broad area along the middle. Length 9.5 mm.; width 1.4 mm. Rhode Island and New Jersey. **fulgidus** Fab.

There is no perceptible difference of any kind between the American examples, which are rather rare, and the European, indicating that the species is a recent introduction to our fauna through commercial intercourse.

Nudobius Thoms.

This genus is far more developed in temperate North America than in Europe and probably originated on this continent. The species are rather more slender than those of *Eulissus* and are usually black with pale elytra, but in the European *collaris*, the prothorax is testaceous and the elytra black, this being a very exceptional form. In many characters *Nudobius* is somewhat intermediate between *Eulissus* and allied genera and *Xantholinus*, but in the rapid medial deflection of the side margins of the prothorax, which unite with the lower margin and do not continue separate therefrom to the apex, it is wholly isolated. The integuments are highly polished throughout, but the surface of the head and pronotum has, besides the normal punctures, a system of very minute sparse punctules, evenly distributed throughout, and these surfaces have besides a very feeble and frequently obsolescent minute transverse wavy strigilation. The species in my cabinet may be described as follows: —

Head behind the line of the antennae about as long as wide..............2

Head behind the antennae longer than wide...........................8

2 — Species of the Atlantic regions. Body small in size, rather slender, moderately depressed, black, the pale elytra clouded with piceous-black posteriorly and externally; legs pale rufous, the antennae piceous, rufous toward base; head rather coarsely, very sparsely punctured even toward the sides; antennae much longer than the head; prothorax slightly narrower than the head, a fourth longer than wide, the sides strongly converging posteriorly from a short distance behind the anterior angles to the base, the punctures very fine as usual; elytra distinctly longer than wide, a little wider than the prothorax, and, on the suture, about as long, narrower than the head, sparsely punctured, the punctures feebly sublineate on parts of the disk but wholly wanting in a polished convex line at the summit of the deflexed flanks as usual; abdomen minutely, very remotely punctate. Length 6.5 mm.; width 0.9 mm. Massachusetts and Virginia to Lake Superior; Ohio (Cincinnati). [= *assimilis* Kirby, *consentaneus* and *flavipennis* Nordm., *kiesenwetteri* Sachse and *palliatus* Mels.]..............................**cephalus** Say

Species of the Sonoran regions.......................................3

Species of the true Pacific coast fauna..............................5

3 — Elytra large, much longer as well as wider than the prothorax. Body much stouter than in *cephalus*, black as usual, the elytra piceous-black, obliquely pale in nearly basal half; legs dark ferruginous, the antennae piceous-black, becoming rufo-piceous toward base, stouter distally than in *cephalus*; head rather coarsely, very sparsely punctate, the punctures less sparse toward the eyes, the front with a small impression between the posterior ends of the frontal grooves; prothorax much narrower than the head, a fifth longer than wide, smaller than usual in the genus, the sides as strongly convergent as in *cephalus*; elytra longer than wide, a fourth longer and wider than the prothorax but not quite as wide as the head, sparsely and rather confusedly punctured; abdomen very sparsely punctulate. Length 7.2 mm.; width 1.1 mm. Utah (southwestern)..**nubipennis** n. sp.

Elytra relatively smaller, equal in length to the prothorax and only slightly wider, the body black throughout, with rufous legs and piceous-black antennae, the latter becoming slightly paler toward base, the elytra clear and bright testaceous throughout; head coarsely and moderately sparsely punctured toward the sides............................4

4 — Form stouter and more parallel, the prothorax only slightly narrower than the head and less strongly narrowed behind from near the apex, about a fifth longer than wide; elytra only slightly longer than wide, subequal in width to the head, the punctures sparse and subserial at the middle, closer and broadly, irregularly aggregated toward the suture; abdomen sparsely punctulate as usual. Length 8.0 mm.; width 1.2 mm. Arizona (Phoenix)........................**phoenicis** n. sp.

Form more slender, the prothorax much narrower than the head, nearly two-fifths longer than wide and strongly narrowed behind from near the apex; elytra distinctly elongate, obviously narrower than the head, sparsely punctate, with a somewhat well accentuated series of very slightly larger punctures along the middle, the punctures fine, not noticeably aggregated along the suture, except a single line along the summit of the sutural bevel; last joint of the antennae slightly narrower than the tenth, longer than wide and conoidally pointed. Length 8.0 mm.; width 1.1 mm. Arizona (Williams) and New Mexico (Las Vegas)..**arizonicus** n. sp.

5 — Second antennal joint a little shorter than the third, the latter being more strongly obconical in form, body large in size, strongly punctured..6

Second antennal joint rather longer and stouter than the the third, the latter less strongly obconical...7

6 — Front distinctly though finely punctured between the frontal grooves; elytral punctures moderately sparse and strong, the elytra clear rufous throughout, the legs pale testaceous; head large and well developed, very coarsely, rather closely punctate toward the sides, the punctures elongate, strong, more rounded and close-set beneath, becoming less distinct and sparser toward base; mandibles with a fine groove on the flat under surface in addition to the deep external groove; prothorax much narrower than the head, longer than wide, strongly narrowed posteriorly from near the apex; elytra as long as the prothorax and wider, longer than wide and narrower than the head; punctures of the medial series stronger than the others as usual, the punctures exterior to the series much finer than those toward the suture, the summit of the deflexed flanks narrowly impunctate as usual. Length 7.7–9.2 mm.; width 1.25–1.4 mm. Washington State and Oregon (The Dalles)..**pugetanus** n. sp.

Front almost impunctate between the grooves; elytral punctures coarser and very sparse, the elytra pale testaceous, with the basal, apical and lateral margins blackish; head well developed, the punctures rather less coarse and not quite so close-set toward the sides as in *pugetanus*, the under surface less strongly and more sparsely punctured; prothorax longer than wide, slightly narrower than the head, moderately narrowed behind; elytra elongate, slightly longer and obviously wider than the prothorax and fully as wide as the head, the punctures coarse and strongly impressed throughout, obscurely serial at the middle. Length

9.6 mm.; width 1.35 mm. California (Truckee — elevation 5800 feet), — H. F. Wickham .... **limbalis** n. sp.

7 — Body larger and much stouter, black, the abdomen somewhat picescent; elytra flavo-testaceous, with the apical margin feebly and very narrowly infumate, the legs testaceous, the antennae dark red-brown throughout; head well developed, coarsely and somewhat closely punctured except broadly toward the middle, the under surface also strongly punctured: prothorax longer than wide, much narrower than the head, strongly narrowed posteriorly; elytra large, longer than wide, equal in length to the prothorax and distinctly wider, almost as wide as the head, the punctures much less coarse than in the preceding two species and more numerous, gradully rather close-set toward the suture, the medial series of coarser punctures distinct except toward tip; abdomen minutely, feebly and sparsely punctulate, polished as usual. Length 6.5–8.5 mm.; width 1.2–1.4 mm. California (Sta. Clara and Sta. Cruz,— under pine bark in February) .... **corticalis** n. sp.

Body small and slender, black, the legs and elytra pale testaceous, the latter feebly infumate at the apex, the antennae piceo-testaceous; head less developed, the punctures coarse and deep but unusually sparse even toward the sides, strong but rather sparse on the under surface: antennae more noticeably longer than the head than in the preceding species; prothorax elongate, longer than the head and only very slightly narrower, moderately narrowed posteriorly; elytra rather smaller than usual, longer than wide, not quite as long as the prothorax and obviously wider, about as wide as the head, the punctures only moderately coarse, rather sparse throughout, lineate at the middle as usual. Length 6.2 mm.; width 0.88 mm. California (Siskiyou Co.). **debilis** n. sp.

8. — Body moderately large and slender, black, the abdomen somewhat picescent, the legs and elytra clear and bright rufous, the latter somewhat infumate at base, the antennae dark rufo-piceous; head well developed, elongate, parallel, the sides nearly straight, the base truncate, with the angles rather narrowly rounded; second and third antennal joints equal in length, the former somewhat the thicker as usual: surface only moderately coarsely and very remotely punctate even laterally, the punctures sparse on the convex flanks, becoming strong but only moderately coarse and less sparse over the flattened under surface; prothorax of the usual form, narrower than the head, elongate, narrowed posteriorly; elytra notably elongate, as long as the prothorax and distinctly wider, not as wide as the head, the punctures only moderately coarse, sparse and confused in arrangement, with the usual close-set medial series indistinct. Length 7.7 mm.; width 1.1 mm. Texas (Houston), Alabama (Citronelle) and West Virginia. **luridipennis** n. sp.

Body smaller and very slender, black, the abdomen rufo-piceous but clouded darker toward tip, the elytra pale and bright luteo-flavate, with the base — more broadly — and the flanks, abruptly black; legs pale flavate, the antennae dark rufous throughout, rather thick and nearly as in *luridipennis;* head elongate, parallel, remotely and only moderately coarsely punctate, the convex flanks still more remotely, the under surface less sparsely and distinctly; prothorax elongate, narrower than the head, of the usual form, with the sides nearly straight and distinctly converging posteriorly throughout; elytra longer than wide, not quite as long as the prothorax but distinctly wider, and, behind, fully as wide as the head, the sides diverging from the base; punctures small and very sparsely scattered throughout, with very indistinct linear arrangement near the smooth polished upper part of the flanks; abdomen parallel, narrower than the elytra, distinctly, sparsely punctate, with a smooth median line. Length 6.7 mm.; width 0.9 mm. West Virginia, — A. D. Hopkins....................**elegantulus** n. sp.

The punctures of the pronotum are notably fine, feeble, very sparse and inconspicuous throughout the genus *Nudobius* and are arranged in the usual two discal series, each containing some 5–7 punctures and an arcuate submarginal line, at each side, of nearly the same number; there are, in addition, some isolated punctures near the apical and anterolateral margins. The sexual characters are very feeble, the male having the sixth ventral arcuato-truncate at tip, the female having the latter more strongly and evenly, though still broadly, rounded. There are but few striking divergencies of structure and the species are remarkably homogeneous throughout, though *luridipennis* and *elegantulus* are unusually distinct because of the peculiar form and punctuation of the head.

Xantholinus Serv.

The European species of this genus are numerous and include some of the largest palaearctic members of the tribe, but in America I have been unable to find more than one, and this a rather small and aberrant form, widely distributed over the Pacific coast regions. The body is larger and stouter than in *Gyrohypnus*, with a much larger head, having the gular sutures united from well before the middle, forming a coarse deep groove to the base. In typical species, such as *glabratus* and *relucens*, the pronotal punctures are rather coarsely impressed, few in number and disposed in two dorsal series of about five and a sublateral series at each side of 5–6, with a few between the latter and the edge and some smaller punctures near the apical angles; in such forms as *rufipennis* Er., the series are placed similarly but the punctures become fine and more numerous, being rather close-set in the series. Our *picipennis* constitutes still another group, with the dorsal punctures coarsely impressed and few in number, nearly as in the *glabratus* group, though the dorsal series terminate at a greater distance before the base; the sublateral series are similar, and, at some distance within each anterior angle, there is a cluster of three or four punctures, also others along the lateral and apical margins. The elytral punctuation of the European species is nearly as in *Nudobius*, and the feeble sexual characters throughout resemble those prevailing in that genus. Our single representative may be described as follows: —

Body rather stout, parallel, moderately convex, polished, deep black, the elytra and legs piceo-testaceous throughout, the antennae dusky; head behind the antennae quadrate, parallel and nearly straight at the sides, the basal angles rounded; sides behind the eyes flattened, this surface more inferior than dorsal in position, confusedly, closely and strongly punctured, its upper and lower bounding edges polished, subprominently rounded and impunctate; upper surface convex, coarsely and closely punctured, with a very broad and somewhat abruptly defined median impunctate area, the punctures of the under surface strongly, though not so closely impressed; neck rather more than two-fifths as wide as the head; antennae obviously longer than the head, with the outer part subparallel and only moderately stout, the second and third joints equal and each distinctly elongate; prothorax but little longer than wide, slightly narrower than the head, the sides rather feebly converging and varying from straight to feebly arcuate from the apical to the basal angles, both of which are rounded; elytra well developed, rather longer than wide, as long as the prothorax to a little longer and distinctly wider, not very coarsely but deeply, evenly, confusedly and somewhat sparsely punctate, the upper line of the deflexed flanks subimpunctate; abdomen finely, sparsely punctulate; hind tarsi with the first four joints decreasing very gradually in length. Length 6.2–7.5 mm.; width 1.2–1.4 mm. California (Monterey) to British Columbia.

picipennis Lec.

This is the most abundant Xantholinid of the Pacific coast and is subject to comparatively little variability, the head in some specimens — presumably male — being larger than in others, but not differing otherwise. One specimen, from British Columbia, has the elytra piceous-black but probably from accidental causes.

Gyrohypnus Steph.

In this genus the third palpal joint is actually shorter and the fourth relatively much longer and more acutely and gradually pointed than in *Xantholinus*, and this character, in conjunction with the different form of the gular sutures, as stated in the table, seems to prove that *Gyrohypnus* should not be regarded as a subgenus of *Xantholinus.* The species are smaller and more slender as a rule than in that genus, and the head is less developed, but, in a similar manner, *Gyrohypnus* is made up of a number of groups distinguished by peculiarities of pronotal sculpture and general facies, one or two of which approach some of the more aberrant groups of *Xantholinus* rather closely in appearance; this remark applies particularly to our *obsidianus* group, which strikingly recalls the American *picipennis* group of that genus, especially in the sculpture of the head and pronotum. In geographical distribution *Gyrohypnus* differs greatly from *Xantholinus*, the former being poorly represented in palaearctic regions but remarkably developed in the nearctic provinces, the reverse being the case in *Xantholinus.* Our species can be readily assigned to the following four subgeneric groups, defined principally by pronotal sculpture: —

Frontal grooves very long and conspicuous; gular sutures distinct.......2
Frontal grooves short; gular sutures effaced..............................5
2 — Sides of the head with a broad, parallel-sided, flattened and punctured line, involving the lower part of the eyes and extending to the arcuation of the basal angles. Nearctic regions throughout....................3
Sides of the head almost evenly convex, the flattened area obsolescent; surface more convex throughout, generally very feebly sculptured....4
3 — Pronotal punctures coarse, 4–6 in number in the dorsal series...Group **I**
Pronotal sculpture finer as a rule, the punctures much more close-set in the dorsal series and 7–14 in number...........................Group **II**
4 — Punctures of the head and pronotum very sparse, those of the dorsal thoracic series 10–12 in number; surface always highly polished and devoid of minute strigilation anteriorly. Nearctic Atlantic regions.
Group **III**
5 — Dorsal series of the pronotum composed of 10–12 punctures; under surface of the head without minute strigilation. Sonoran regions of the Pacific coast...Group **IV**

Groups I and II correspond satisfactorily with palaearctic species of the *punctulatus* and *angustatus* type, but the last two groups are probably peculiar to America. The rather numerous species may be defined as follows: —

Group I.

Color black or piceous-black, the elytra generally paler in part..........2

Color testaceous or piceo-testaceous, the head black or blackish..........5

2 — Elytra black throughout. Body stout, narrowed anteriorly, moderately convex, deep black throughout, the antennae black, the legs dark piceo-testaceous; lustre shining; head small, rather longer than wide, parallel and straight at the sides, truncate at base, the angles narrowly rounded, the median parts smooth, the punctures coarse, deep and notably close-set toward the sides; flattened line behind the eyes densely, rather coarsely punctate, concave posteriorly, the edges becoming acute and very distinct; under surface elevated along the gular sutures, rather coarsely, closely punctate; prothorax obviously wider than the head, but slightly longer than wide, the angles broadly rounded; sides moderately converging and somewhat arcuate; serial punctures coarsely impressed, the dorsal series ending at basal third, with its 4–5 punctures very evenly spaced; sublateral series of 5–6 punctures and some scattered punctures near the anterior angles distinct; elytra quadrate, as long as the prothorax and much wider, coarsely punctate, each with two medial close-set series, unevenly punctured toward the suture; abdomen finely, rather sparsely punctulate. Length 6.7 mm.; width 1.2 mm. New York, Canada, Iowa, Lake Superior, Manitoba, Nevada (Reno) and Oregon (Albany). [=*americanus* Dej., i. litt.]. **obsidianus** Mels.

Elytra piceous, with the sides and tip piceo-testaceous. Body more slender than in *obsidianus*, piceous, the legs and antennae piceo-testaceous; head moderately convex, smooth, sparsely and coarsely punctured at the sides, the under surface very sparsely punctured, the sides with a broad shallow longitudinal groove which is distinctly margined and marked with a few shallow punctures; prothorax with the dorsal series 4–5 punctured, the lateral series punctured, with a large puncture nearer the margin as usual; elytra sparsely and coarsely punctate, the punctures arranged in nearly regular rows. Length 4.7 mm. Forida (Cedar Keys). [=*floridae* Duviv.]............**temporalis** Lec.

Elytra pale testaceous or yellowish, more or less gradually darker in about basal half...3

3 — Sublateral series of the pronotum 7–9 punctured. Body more slender than *Xantholinus picipennis*, piceous-black, the antennae and legs dark ferruginous, the elytra ferruginous, blackish in about anterior half; head moderately convex, rather elongate, the hind angles rounded; upper surface smooth at the middle, sparsely and coarsely punctured at the sides; frontal grooves as usual; under surface very sparsely and

coarsely punctured, the lateral edge obtuse, much less defined than in *X. picipennis;* prothorax oblong with rounded angles, distinctly longer than wide, slightly narrowed behind, the dorsal series 3–4 punctured, the lateral series curved as usual; elytra rather finely and indistinctly punctate, with a submedial series of fine but regular punctures; abdomen smooth, piceous, the hind margins of the segments paler, the ventral segments more broadly margined with pale piceous. Length 5.6 mm. California (San Bernardino and Mojave Desert).......**dimidiatus** Lec.

Sublateral series 4–6 punctured; hind angles of the head obtuse but scarcely rounded 4

4 — Head very coarsely, sparsely punctured, the basal angles very obtuse, the base strongly arcuate throughout the width, the surface broadly smooth along the middle as usual; body only moderately slender and convex, polished, deep black almost throughout, the elytra and abdominal tip pale, the former very gradually infumate with blackish from near the middle to the base; legs pale, the antennae dark testaceous; head behind the antennae just visibly longer than wide, the sides parallel and very feebly arcuate, the flattened line at the sides well defined, in great part rather coarsely and closely punctate; under surface coarsely and sparsely punctured; prothorax a third longer than wide, not quite as wide as the head, the sides moderately converging and nearly straight, the angles not very broadly but evenly rounded; dorsal punctures coarsely impressed, unevenly spaced; elytra about as long as wide, the sides straight and feebly diverging from the base, about equal in length to the prothorax and wider than the head, in large part impunctate dorsally but rather broadly and confusedly so toward the suture, the isolated medial series composed of very small, widely spaced punctures and another more oblique series external to this is observable in apical half; abdomen very finely, sparsely punctulate, the segments not obviously paler at their apices. Length 5.8 mm.; width 0.93 mm. California (Pasadena),— A. Fenyes....**infumatus** n. sp.

Head very coarsely and unusually closely punctured toward the sides, the base feebly arcuato-truncate, the basal angles only slightly more than right and not at all rounded; body similar in form to the preceding and almost similar in coloration, except that the elytra are much more abruptly and deeply black in basal half and the legs darker testaceous; head behind the antennae rather longer than wide, the sides parallel and straight, the post-ocular line flat, coarsely and very closely punctured, the part along its upper margin impunctate as usual; under surface flat throughout, the punctures very coarse and sparser, unevenly distributed, forming one or two longitudinal series near the sides and irregularly scattered near the sutural lines, which are relatively rather fine; prothorax fully two-fifths longer than wide, equal in width to the head, the sides feebly converging and nearly straight, the angles well rounded; dorsal punctures rather coarsely impressed, very uneven in size and spacing; elytra quadrate, distinctly shorter and wider than the prothorax, the punctures small, rather feeble and sparse, disposed nearly as in *infumatus*. Length 6.5 mm.; width 1.1 mm. Arizona.

bipartitus n. sp.

5 — Under surface of the head minutely strigilate in close-set wavy lines 6

Under surface of the head highly polished and smooth, not strigilate.... 9

6 — Dorsal series of the pronotum continuing barely to basal third as in all the preceding species.. 7

Dorsal series of the pronotum continuing to basal fourth or less; body smaller and more slender, with the cephalic punctures smaller and more close-set and the flattened post-ocular line sometimes less defined at the edges.. 8

7 — Body larger, pale rufo-testaceous, the elytra more flavate, the abdomen darker and blackish-piceous, the head deep black, the legs and antennae ferruginous; head behind the antennae rather longer than wide, parallel, the sides feebly arcuate; base truncate, the angles broadly rounded; punctures coarse but smaller than in the preceding species and remarkably sparse even toward the sides, the post-ocular line perfectly flat throughout, well defined, strongly but not very closely punctate; under surface shining, strongly and sparsely punctate; prothorax scarcely a third longer than wide, distinctly narrower than the head, the sides strongly converging and straight, the angles moderately rounded; surface with scarcely a puncture except the dorsal and sublateral series, each of 4–5 punctures, and about two others, isolated and rather larger, well within the apical angles; elytra subquadrate, not quite as long as the prothorax and but little wider, the punctures small but distinct, confused near the suture, elsewhere wanting on the dorsal surface, except a distinct medial series and another exterior and parallel in apical half only and composed of finer punctures; abdomen minutely, sparsely punctulate. Length 6.5 mm.; width 1.0 mm. New York, Virginia, Ohio (Cincinnati) and Louisiana. [= *sanguinolentus* Mels.] ....**emmesus** Grav.

Body smaller but larger and stouter than in *fusciceps*, pale rufo-testaceous in color, the elytra rather more flavate; head black, the abdomen pale red brown throughout; head behind the antennae distinctly elongate, otherwise similar to that of *emmesus*, except that the punctures toward the sides are much more close-set; prothorax narrower and relatively more elongate, much narrower than the head, similar in sculpture; elytra elongate, only very slightly wider than the prothorax and much narrower than the head, the punctures coarser and more numerous than in *emmesus*, similarly lineate on the disk; abdomen distinctly narrower than the elytra, parallel, finely but very conspicuously and asperately punctate, more strongly so than in *emmesus*. Length 5.8 mm.; width 0.85 mm. Louisiana (Ponchatoula),— G. W. Bock...**luteiventris** n. sp.

8 — Antennae scarcely at all enlarged toward tip, the second and third joints equal, both elongate. Body larger, pale brownish-testaceous, the legs concolorous, the antennae dark red-brown; head piceous-black, longer than wide, the sides almost parallel and very feebly arcuate; basal angles broadly rounded; flattened line behind the eyes rather closely punctured, the punctures of the upper surface deep but only moderately coarse, separated by about twice their own widths toward the sides, those of the under surface fine but strong and sparse; prothorax elongate, rather wider than the head, with two series of

about five punctures each at each side and a few others isolated toward the sides and apex as usual, the sides distinctly converging; elytra rather longer than wide, not quite as long as the prothorax and scarcely at all wider, the medial series close-set and strong; exteriorly there is another nearly entire parallel series of very fine, widely spaced punctures, the latter irregularly aggregated near the suture as usual; abdomen finely but unusually distinctly and not very sparsely punctulate toward the sides. Length 5.5 mm.; width 0.75 mm. New York to Iowa. [=*fusciceps* Fvl., i. litt.]........................**fusciceps** Lec.

Antennae shorter and more compact, distinctly and gradually thicker distally to the apex, the subapical joints much more strongly transverse, the third very small, globular, much shorter than the slightly elongate second joint; body very small in size, slender, colored like the preceding, except that the prothorax is paler testaceous than the parts posterior thereto; head piceous-black, nearly similar in form, the hind angles much less broadly rounded, the punctures toward the sides small but distinct and less close-set, the post-ocular line narrower and less punctate, the under surface strongly, sparsely punctate; prothorax elongate, slightly wider than the head, the sides strongly converging throughout and nearly straight, the surface punctured nearly as in *fusciceps*; elytra elongate, subequal in width to the prothorax and a little shorter, similarly though more finely punctate; abdomen more finely punctulate, rather more broadly and abruptly impunctate along the middle. Length 3.5 mm.; width 0.6 mm. New Jersey and Virginia (Fort Monroe); — rare on sea-beaches....................................**fucosus** Csy.

9 — Body rather slender and convex, almost perfectly parallel, pale rufotestaceous, with the legs concolorous, the abdomen piceous and the head black; antennae dusky testaceous, brighter toward base; head behind the antennae distinctly elongate, varying from subparallel to distinctly inflated basally, the sides nearly straight, the angles at base well rounded; punctures not very coarse but deep, elongate, separated by fully twice their own widths toward the sides; post-ocular line flat with obtusely rounded edges, very deeply and more closely punctate, the punctures of the under surface strong, perforate, moderately close-set over the entire surface; prothorax elongate, not quite as wide as the head, with the sides only moderately converging throughout and almost straight, the apical angles narrowly rounded, the punctures of the dorsal series only extending to basal third; sublateral series of about five punctures, and there is externally and anteriorly a small group of punctures; elytra subquadrate, unusually small, much shorter than the prothorax and equal thereto in width, strongly and moderately coarsely punctured, the punctures of the two equal parallel discal series similar, fine and irregular; narrowly along the suture, and, between these and the first discal series, are a few sparse punctures tending to linear arrangement; abdomen rather closely and distinctly punctulate toward the sides. Length 6.0 mm.; width 0.85 mm. New York (Long Island) and Virginia to Kansas and Colorado (Greeley).............**melanops**

Group II.

Head polished beneath and strigilate with very fine wavy lines 2

Head less shining beneath, where the surface is minutely but strongly reticulate..........11

2 — Prothorax never paler in color than the elytra..........3

Prothorax paler than the elytra, the latter relatively smaller and distinctly shorter than the prothorax..........10

3 — Body black or piceous-black in color, the elytra never more than slightly paler 4

Body black or blackish, the elytra always conspicuously pale..........8

4 — Elytra each with two isolated, parallel and subentire series of dorsal punctures, the punctures toward the suture more or less broadly or completely confused in arrangement; body moderately large in size..5

Elytra each with three more or less complete isolated series of dorsal punctures, the latter more narrowly confused along the suture; body very small in size..........7

5 — Body moderately slender and convex, polished, deep black, the prothorax very dark rufo-piceous, the elytra somewhat less dark than the prothorax; legs dark rufous, the antennae dusky; head oblong, parallel, distinctly longer than wide behind the antennae, the basal angles broadly rounded, the punctures deep but only moderately coarse or close-set; flattened post-ocular line well defined, strongly and closely punctate; punctures of the under surface distinct though not very coarse, rather sparse, still sparser toward the sutures; prothorax somewhat narrower than the head, evidently though not strongly narrowed posteriorly throughout, a third longer than wide, the angles rather narrowly rounded; serial punctures close-set and strong, 8–11 in number in the dorsal series and about as numerous in the sublateral, both series ending anteriorly in confused clusters of smaller punctures, a larger puncture near the side and apical third is also obvious; elytra not quite as long as the prothorax but much wider and distinctly wider than the head, longer than wide; abdomen slightly narrower than the elytra but wider than the head; finely punctulate laterally as usual. Length 4.8–6.6 mm.; width 0.8–1.08 mm. Rhode Island and Ontario to northern New Mexico, Colorado, Nevada, Idaho and Manitoba. [= *obscurus* Er.].
hamatus Say

Body deep black throughout, the elytra scarcely perceptibly paler, the antennae black and the legs dark rufo-piceous in color; elytral punctures less broadly aggregated along the suture..........6

— Form rather stouter, the size larger, as in *hamatus*; head as in that species, with the punctures similar but less close-set, being separated toward the sides by three times their own widths but becoming smaller and closely aggregated in a broad line along the upper margin of the post-ocular flattened line, the latter strongly, somewhat closely punctured; under surface rather finely but distinctly, sparsely punctate, the punctures obsolete toward base; prothorax as in *hamatus*, slightly narrower than the head but with the sides less obviously converging; elytra nearly similar but less distinctly wider than the prothorax and much less broadly, confusedly punctured toward the suture, the impunctate space thence to the first medial series wider. Length 6.3 mm.; width 0.98 mm. Oregon (Portland),— H. F. Wickham..**oregonus** n. sp.

Form very slender, rather smaller in size, polished, convex; head moderate, parallel, behind the antennae much longer than wide, the sides nearly straight; basal angles broadly rounded, the punctures throughout nearly as in *hamatus*; prothorax notably narrow and elongate, two-fifths longer than wide, the sides moderately converging, becoming somewhat sinuate posteriorly, the apical angles rather narrowly rounded, punctured nearly as in *hamatus*; elytra elongate, somewhat shorter than the prothorax and much wider, distinctly wider than the head; abdomen slightly wider than the head, punctulate as in the preceding species. Length 6.0 mm.; width 0.8 mm. Wisconsin (Bayfield), — H. F. Wickham. [= *corvinus* Dej., i. litt.]......................**protractus** n. sp.

7 — Body slender, convex, polished, black, the elytra and antennae blackish-piceous, the legs paler, dark testaceous; head well developed, the sides straight and parallel or feebly diverging to the moderately rounded basal angles; punctures nearly as in *hamatus*, those of the flattened post-ocular line obsolescent posteriorly and those of the under surface sparse and inclined to serial arrangement laterally, broadly subobsolete toward the middle; antennae rather thicker distally, the second joint obviously longer and thicker than the third; prothorax slightly narrower than the head, elongate, distinctly narrowed posteriorly, with the sides somewhat arcuate, the angles broadly rounded; punctures of the dorsal series strong, close-set, 10–12 in number, the sublateral short and irregular, of 5–6 punctures; toward the sides throughout the length there are many other punctures tending to serial arrangement; elytra elongate, slightly longer and much wider than the prothorax; abdomen but slightly narrower than the elytra, minutely, sparsely punctulate. Length 4.5 mm.; width 0.7 mm. California (Elsinore, — Riverside Co.) ....**mollinus** n. sp.

8 — Second and third antennal joints equal in length as usual; strigilation of the under surface of the head subobsolete, the punctures deep and close-set between the gular sutures anteriorly, elsewhere strong but sparse, becoming obsolete toward base; body larger, stouter, polished, black, the abdomen rather distinctly, and the prothorax just visibly, piceous; entire elytra clear and bright rufous in color, the legs pale, the antennae very dark testaceous; head well developed, behind the antennae distinctly elongate, parallel, the sides nearly straight, the basal angles well rounded; antennae parallel through the outer seven joints, moderately thick as usual; punctures coarse, deep and close-set toward the sides, the post-ocular flattened line also deeply and rather closely though less coarsely punctured; prothorax distinctly elongate, narrower than the head, the sides parallel and straight for nearly two-fifths from the apex, then very feebly converging to the base, the angles only slightly rounded; punctures strong, arranged nearly as in *hamatus*; elytra ample, longer than wide, much wider than the prothorax and fully as long, wider than the head, rather strongly punctured almost as in *hamatus*, the two medial series, however, only distinct to a little behind the middle; abdomen rather closely and strongly punctulate toward the sides.

Length 5.7–7.0 mm.; width 0.95–1.0 mm. Sea beaches of New Jersey [= *lecontei* Duviv.]...................................**sanguinipennis** Lec.

Second antennal joint obviously longer and thicker than the third; body much smaller and more slender, the elytra in great part pale flavate in color...9

9 — Strigilation of the under surface of the head obsolescent, the surface smooth and polished, with a few deep punctures between the gular sutures anteriorly, dark piceous to nearly black, the head deep black, the elytra pale flavate, clouded with piceous on the flanks and in nearly apical half; legs pale, the antennae dark rufous; head rather short, behind the antennae not or but slightly longer than wide, the sides straight and feebly converging, — in opposition to the general rule — from the eyes to the rounded basal angles; punctures moderately coarse, deep, sparse toward the sides but closer near the eyes, the post-ocular flattened line much narrower than usual, distinctly punctured; punctures of the under surface fine but strong, sparsely and uniformly scattered though narrowly obsolete along the sutures; prothorax elongate and evidently narrower than the head, the sides feebly diverging from the obtuse and slightly rounded apical angles for a third of the length, then moderately converging and feebly sinuate to the base; punctures of the dorsal and sublateral series rather feeble and only about seven in number; a few coarse punctures along the edge at the apical angles are also visible, the entire surface, as well as that of the head, having very minute, sparsely but evenly distributed punctules as in the genus *Nudobius*, the surface feebly tumid in the middle at base; elytra elongate, much wider than the prothorax and not quite as long, wider than the head, the punctures strong though sparse, the two close-set medial series only distinct in basal half; abdomen very minutely and sparsely punctulate. Length 5.8 mm.; width 0.7 mm. New York (Hudson Valley).......................................**gilvipennis** n. sp.

Strigilation distinct, the space between the gular sutures anteriorly finely and roughly sculptured but scarcely punctured, blackish-piceous in color, the elytra thinner and more diaphanous than usual, pale flavous, feebly infumate at base and thence gradually more narrowly along the suture to behind the middle; legs pale, the antennae very dark testaceous; surface polished, without fine scattered punctules; head moderate, behind the antennae but little longer than wide, more or less distinctly inflated toward base, the angles broadly rounded; punctures rather coarse, deep and close-set toward the sides, the under surface, post-ocular flattened line and pronotal sculpture nearly as in *hamatus*, the latter, however, with fewer extra-serial punctures anteriorly; prothorax elongate, very slightly narrower than the head, the sides distinctly converging from near the apex to the base and virtually straight; elytra somewhat elongate, a little longer than the prothorax and much wider, finely but distinctly, somewhat sparsely punctured nearly as in *hamatus*, the two medial series traceable almost to the apex; abdomen finely, sparsely punctulate toward the sides. Length 3.6–5.3 mm.; width 0.6–0.8 mm. Virginia to Lake Superior and Texas (Austin and Brownsville), Arizona (Riverside and Tuçson) and Mexico (Guanajuato.).....**pusillus** Schse.

10 — Body very slender, small in size, parallel, shining, the elytra and

abdomen very dark or blackish-piceous, the prothorax much paler, testaceous, somewhat clouded with pale piceous, the head black; legs pale, the antennae piceo-rufous; head in form and punctuation and the pronotal sculpture nearly as in *hamatus*; prothorax obviously narrower than the head, elongate, with the sides rather feebly converging from near the apex to the base; elytra somewhat longer than wide, rather distinctly wider than the prothorax but only just visibly wider than the head, the sculpture as in *hamatus;* abdomen finely and inconspicuously punctulate. Length 5.0 mm.; width 0.78 mm. Nevada (Reno), Wyoming (Laramie) and Manitoba........................**macilentus** n. sp.

11 — Form slender, parallel, only moderately convex, very pale piceo-testaceous in color, the head darker and the elytra much paler and more flavate; legs pale, the antennae darker and with the second joint slightly longer and thicker than the third; head moderate, the sides subparallel and the angles well rounded, distinctly elongated behind the antennae, the punctures not very coarse but deep and close-set toward the sides, the post-ocular line normal, rather finely, closely punctured, the punctures of the under surface rather fine and sparse and rendered still less distinct because of the ground sculpture; prothorax elongate, distinctly narrower than the head, the sides moderately converging from near apical third to the base; medial series composed of 12–14 very close-set punctures, the sublateral series also with many close-set punctures and there are numerous others scattered toward the apical angles; elytra elongate, fully as long as the prothorax and much wider, distinctly wider than the head, the punctures moderate in size and rather feebly impressed, somewhat close-set, the arrangement nearly as in *hamatus;* abdomen minutely and inconspicuously punctulate toward the sides. Length 4.2 mm.; width 0.62 mm. Montana to Arizona and New Mexico...................**fragilis** n. sp.

Group III.

Hypnogyra n. subg.

Punctures of the head and pronotum very fine and sparse, the head more strongly convex than in the preceding groups and without the flattened post-ocular line... 2

Punctures of the head coarse as well as sparse...........................3

2 — Body rather stout, parallel, convex, very highly polished, black, the elytra and legs bright rufous throughout, the abdomen blackish-piceous throughout above, the apices of the segments paler beneath, the antennae dusky rufous; head behind the antennae but little longer than wide, just visibly inflated toward base, the angles broadly rounded; sides very feebly arcuate, the punctures extremely small and remotely separated, not closer at the sides or beneath, the median impunctate area unusually wide; oblique ocular grooves distinct; flanks behind the eyes evenly convex; antennae unusually thick, about as long as the entire head, the subapical joints closely joined and rather strongly transverse, the second joint noticeably longer and thicker than the third; prothorax but little longer than wide, somewhat wider than the head, the angles

well rounded, the sides but feebly converging and slightly arcuate throughout; dorsal and sublateral series almost even, composed of very small and widely spaced punctures, the former about ten, the latter about five in number; there are also some rather close-set punctures along the antero-lateral margin; elytra slightly elongate, somewhat longer and but little wider than the prothorax, the punctures very small, rather sparse, arranged as in *hamatus*, the outer of the two medial series less distinct; abdomen but little narrower than the elytra, convex, finely but very distinctly and only moderately sparsely punctulate, still more distinctly beneath. Length 6.7–7.3 mm.; width 1. mm Iowa (Iowa City), — H. F. Wickham..................**vernicatus** n. sp.

Body nearly similar to the preceding but much smaller, with less developed head and less minute punctuation, the coloration and lustre similar throughout, the prothorax rather less intensely black, the antennae similar in color and structure; head rather small, similar to that of *vernicatus*, the punctures a little larger and somewhat less remotely separated but still very sparse, very minute on the flanks and under surface and rather sparser; prothorax slightly elongate, distinctly wider than the head, similar to that of *vernicatus* but narrower and more elongate and with the dorsal and sublateral series much less regular, with the punctures stronger and more close-set, with numerous outlying punctures anteriorly and more scattered toward the anterior angles; elytra but little longer than wide, somewhat shorter than the prothorax and only just visibly wider, the punctures sparse but stronger than in the preceding, more narrowly aggregated along the suture and usually arranged in three series along the middle; abdomen almost similar. Length 5.0–5.8 mm.; width 0.8–0.85 mm. Ohio (Cincinnati), — Chas. Dury....................................**micans** n. sp.

3 — Form slender, black, the antennae, legs and elytra dark red, the abdomen dark piceous, with the tip rufo-piceous; head convex, elongate, suboval, rounded behind, very sparsely punctured at the sides, the punctures coarse; oblique ocular grooves short; under surface with a few scattered coarse punctures, nearly smooth behind; prothorax elongate-oblong, with much rounded angles; dorsal series of 9–10 strongly marked punctures, the sublateral series curved, well defined, of 9–10 punctures; between the two and near the front margin there is a group of four punctures, also some near the front angles; elytra distinctly and sparsely but not deeply punctured almost in rows. Length 7.5 mm. Michigan (Detroit)..............................**gularis** Lec.

Group IV.

Closely resembles "*Xantholinus hamatus*," differing by the shorter frontal grooves, by the gular sutures being effaced and the under surface of the head smooth between the punctures, instead of finely strigose; there are also some large punctures between the dorsal and sublateral series of the prothorax, which cause the latter series to appear irregular; the elytra are more strongly punctured and the punctures are not arranged in series; the body is testaceous-brown in color, with the head darker and the dorsal series of the pronotum have 10-12 punctures. Length 4.0 mm. California (San Diego)............................**nanus** Lec.

Some of the species vary greatly in size and are of unusually wide distribution; the measurements of length refer to individuals with moderate protrusion of the abdomen; in the case of more constant species, these measurements refer to an average example. The short reference to *fusciceps*, given by LeConte (Trans. Am. Ent. Soc., 1880, p. 172), will presumably have to be regarded as a description and the species is therefore attributed to that author, although its true status was wholly overlooked; it is by no means a variety of *emmesus* but a very distinct species; *fucosus* is allied to *fusciceps* but is also distinct and could not be confounded with it by any careful observer; it is the smallest species of the genus. The commonest and most widely diffused species are *obsidianus*, *hamatus* and *pusillus*; *oregonus* may be a recently evoluted derivative of *hamatus*, to which it is evidently very closely allied and more specimens are much to be desired, in order to arrive at a more definite conclusion. *Gilvipennis* is an aberrant form, although satisfying all the generic characters of *Gyrohypnus*. The four species *temporalis*, *dimidiatus*, *gularis* and *nanus* are unknown to me in nature, and the above descriptions are derived from the published statements of LeConte. I formerly regarded *vernicatus* as the true *gularis*, but, as the cephalic and pronotal punctures of that form are by far the finest observable in the genus, constituting its most striking character, it would appear to be specifically different, since LeConte states that the punctures of *gularis* are coarse; there can be little doubt, however, that they belong to the same group, which, because of the absence of the post-ocular flattened line, so constant in all the other species, should be held to have subgeneric rank. It is probable also that *nanus* will constitute another subgenus, but I have no means of asserting this at present.

Duvivier (Cat. 1883), gave the name *floridae* to *temporalis* Lec., because antedated by *temporalis* Shp., of Ega, South America; as however, *temporalis* Shp., has no discal pronotal series, it belongs to a genus unquestionably different from

Xantholinus or *Gyrohypnus*. The same author replaces *sanguinipennis*, of LeConte, by *lecontei*, because of *sanguinipennis* Kolen., of the Island of Crete, but, as the latter is a *Eulissus* and *sanguinipennis*, of LeConte, is a *Gyrohypnus*, the change of name is unnecessary.

Xestolinus n. gen.

In the formation of the sides of the head behind the eyes, fine arcuate gular sutures subuniting behind the middle of the post-oral surface and extremely minute, remotely scattered punctuation of the head, this genus approaches the third group of *Gyrohypnus*, as defined above, but it differs from any member of *Gyrohypnus* in its short, stout and rather compressed maxillary palpi, with the last joint obviously shorter than the preceding and very obtusely conical; also in its well developed, stout and compact antennae, with the second and third joints equal and elongate-obconic in form. The abdomen is very greatly developed, being nearly as wide as the elytra and conspicuously wider than the head and prothorax, giving the species a peculiar appearance, and the elytra are differently sculptured from those of the preceding genera. At present we have only discovered two species as defined below :—

Stout in form, moderately convex, polished throughout, the under surface of the head without trace of minute strigilation; prothorax, elytra and legs pale rufo-testaceous throughout, the second more flavate than the first; antennae rather more dusky, the head darker piceo-testaceous, clouded with blackish above, the abdomen piceous-black, not paler at tip; head oblong, distinctly elongate behind the antennae, the sides for some distance behind the eyes parallel and straight, then very broadly rounding into the base, the frontal grooves moderately long and deep, the oblique ocular fine and short; punctures minute and very widely dispersed, a narrow indefinite post-ocular longitudinal line, punctured more closely in two series, with a larger puncture behind the middle, the under surface finely, very sparsely punctate; prothorax fully two-fifths longer than wide, obviously narrower than the head, the sides distinctly converging from the well rounded apical angles, the apex arcuate; dorsal punctures very fine, 7–8 in number, the sublateral series much shorter, more close-set, arcuate, composed of about seven equally minute punctures; there are some also sparsely scattered toward the sides anteriorly; elytra rather elongate, fully as long as the prothorax and very much wider, the punctures fine, impressed, very sparse throughout and sublinear in arrangement; abdomen finely, sparsely punctulate, more distinctly beneath. Length 8.0 mm.; width 1.3 mm. Arizona (Walnut), — H. F. Wickham..............**abdominalis** n. sp.

Similar in form to the last and similar in coloration, the integuments very highly polished; head oval in form behind the antennae, the frontal grooves distinct, the ocular terminating inwardly in a rather large punctiform pit, the punctures extremely minute and sparse, rather larger but quite as remotely separated beneath, the flanks evenly convex and without trace of the feebly flattened post-oculur streak of *abdominalis;* sides arcuate, merging gradually into the very broadly rounded basal angles; prothorax not so elongate and more broadly and feebly arcuato-truncate anteriorly, a third longer than wide and distinctly narrower than the head, the punctures rather more distinct, the dorsal series of 8–9, the arcuate sublateral of about seven, both series indistinct in apical third and fourth, the dorsal extending to basal fifth or sixth; there are some scattered punctures anteriorly and along the side margins as usual, and two large apical punctures and one at each basal angle bear each a very long tactile seta as in the preceding; elytra a little longer and very much wider than the prothorax, the punctures still more minute and indistinct than in *abdominalis*, very sparse throughout and faintly subserial in arrangement; abdomen very minutely, sparsely and feebly punctulate, only slightly more visibly so beneath. Length 8.0 mm.; width 1.28 mm. Utah (southwestern),— Weidt..**oviceps** n. sp.

These species without much doubt constitute a specialized type, confined to the arid regions of the Sonoran province; they have a peculiar facies which will render them easy to identify.

Lissohypnus n. gen.

The elongate third antennal joint is the chief character distinguishing this genus from the three preceding, and, in this respect, there is a reversion to *Eulissus* and related genera. In the united gular sutures, well developed head and form of the fourth papal joint, *Lissohypnus* resembles *Xantholinus*. In the short third palpal joint, with much longer fourth joint, type of sculpture throughout and flattened post-ocular line, it resembles *Gyrohypnus*, but in antennal structure it differs very strikingly from either of those genera. The single species in my cabinet may be readily known by the following outline description: —

Stout, parallel, moderately convex, highly polished, black, the last two abdominal segments pale testaceous in color, the entire elytra and legs pale and bright rufous, the antennae dusky rufous, paler toward base; head behind the antennae longer than wide, the sides parallel and straight, the angles broadly rounded and beginning at two lengths of the eye behind the latter; punctures coarse, deep and moderately close-set toward the sides, nearly as coarse but not quite so close-set beneath throughout, the interspaces not at all strigilate, the flattened post-ocular line distinctly defined, coarsely and closely punctured; antennae rather longer than the head, stout and compact distally, the tenth joint about three-fifths wider than long; prothorax about a third longer than wide, very little narrower than the head, the sides very feebly converging and somewhat uneven, the angles rounded; punctures strong, moderately coarse, the dorsal series of about ten, the sublateral of 7–9, both rather uneven and with numerous other strong punctures toward the apical angles; elytra barely as long as wide, about equal in length to the prothorax and only slightly wider, the punctures strong but rather sparse, arranged nearly as in *Gyrohypnus hamatus;* abdomen minutely, sparsely punctate, more distinctly beneath as usual, very slightly wider than the head. Length 8.0 mm.; width 1.38 mm. Texas (Austin)..**texanus** n. sp.

This is one of the larger and more conspicuous of our Xantholini, but is unfortunately represented by a single specimen thus far.

Leptacinus Erichs.

The type of this genus is assumed to be the European *parumpunctatus* Gyll., representing a radical departure from the preceding genera of the subtribe Xantholini in having the fourth palpal joint very slender and aciculate; it differs also in having the oblique ocular, as well as the frontal grooves, long and greatly developed and in type of elytral sculpture, the punctures being confusedly aggregated along the suture, but, from the medial series to the extreme lower margin of the flanks, having a linear arrangement. In the preceding genera the elytral punctures are apparently always confused throughout on the deflexed flanks. The pronotal punctures are peculiarly coarse, deeply impressed and always few in number. The flattened longitudinal line behind the lower part of the eyes is nearly as in *Gyrohypnus* and several other genera, though narrower, but here its lower margin is rendered apparently more prominent by reason of a feebly punctured eroded longitudinal groove at each side of the under surface, and the upper margin is more obtuse and less definite. We have but two rather rare species which may be described as follows: —

Body rather stout, subparallel, convex, very highly polished, no strigilation or reticulation being observed at any part of the upper surface, or on the lower surface of the head and abdomen, piceous-black in color, the head rather darker, the elytra very pale, becoming gradually infumate in basal half, the legs and antennae pale; head not longer than wide behind the antennae, suboval, broadening basally, with the sides arcuate, the angles rather narrowly rounded; punctures very coarse, deep and rather close-set toward the sides, broadly wanting along the middle, the post-ocular flat line strongly and closely punctate in a double line along its middle only, the under surface with a few coarse elongate punctures, impunctate toward base; sutures arcuate, gradually becoming contiguous behind the middle, the space between them finely, very roughly sculptured and almost lustreless; antennae longer than the head, rather slender; prothorax but slightly elongate, about as wide as the head, the sides moderately converging and obviously arcuate throughout, the anterior angles very broadly rounded; dorsal series of about five, the sublateral of about four, very coarse, irregular and widely spaced punctures; between the latter series and the sides anteriorly there is a very large setigerous puncture; elytra ample, longer and much wider than the prothorax, the punctures of the medial series larger and more close-set than those of the lateral series and separated from the sutural punctures by a wide sculptureless space; abdomen finely, sparsely punctulate. Length 4.9 mm.; width 0.9 mm. New York (Hudson Valley)........................**cephalicus** Lec.

Body stout, parallel, convex, nearly similar in sculpture to the preceding, black in color, the prothorax bright rufous, the elytra pale flavo-testaceous, somewhat diaphanous, clouded with black toward the suture, narrowly at apex, gradually more broadly basally and involving the entire width at base; legs pale, the antennae slightly darker, testaceous; head behind the antennae but slightly longer than wide, feebly inflated basally, the sides arcuate, the angles rounded, very broadly impunctate toward the middle, the punctures very coarse and distinctly close-set laterally, the flattened post-ocular line narrow, closely, confusedly and strongly punctate, becoming smooth near the edges; under surface coarsely, less closely punctate, the lateral grooves as in *cephalicus;* prothorax larger, nearly a third longer than wide, only very slightly narrower than the head, the converging sides nearly straight, the apical angles broadly rounded; dorsal series of about six punctures, rather smaller than in *cephalicus*, extending to basal fifth or less, the sublateral series short, of about four punctures; there is also a single isolated puncture between the anterior limit of the latter series and the side margin; elytra rather longer than wide, with slightly diverging straight sides, slightly wider than the prothorax, the suture evidently shorter than the latter, punctured nearly as in *cephalicus;* abdomen parallel, somewhat narrower than the elytra, punctured nearly as in the preceding. Length 5.0 mm.; width 0.9 mm. Kentucky and Missouri (St. Louis)..............................**rubricollis** n. sp.

The sexual characters in this genus are unusually pronounced, the male of *rubricollis* having the sixth ventral broader and evenly, rectilinearly truncate throughout its width at apex, the female having this segment rather narrower and more trapezoidal and broadly, feebly and angularly lobed at tip, the lobe not porrect but bent downward, with an attendant transversely lunate impression of the surface before it. In the female of *cephalicus*, which is the only sex at hand, the lobe of the sixth ventral is similarly very strongly bent downward, but it is here truncate and there is no impression of the segmental surface. In the female of *parumpunctatus* the lobe is nearly as in *cephalicus*, truncate at tip and bent down vertically, but it has a posterior median impression, which causes it to appear broadly bilobed in a line of sight from below perpendicular to the axial line of the body. *Cephalicus* is very closely allied to *parumpunctatus* but differs in its shorter, broader and more ovoidal prothorax; it is probably the species that has been mistaken for the latter by certain European observers.

Leptacinodes n. gen.

This genus, founded upon the European *Leptacinus batychrus* Gyll., and related species, differs from *Leptacinus* in the rather more conical form or relatively thicker base of the fourth palpal joint, less developed oblique ocular grooves, wholly obsolete lateral grooves of the under surface of the head, smaller and much more numerous punctures of the dorsal pronotal series and in its generally rather smaller and more fragile species, which seem to be more numerous and diversified. The prevalence of fine wavy strigilation on the head, pronotum and abdomen is also a distinguishing feature. The gular sutures are arcuate, gradually approaching each other posteriorly and become extremely approximate but scarcely coalescent behind the middle. The American species may be thus defined: —

Under surface of the head finely strigilate in wavy lines; prothorax dark in color.. 2

Under surface of the head smooth and polished, without strigilation; prothorax pale.. 3

2 — Body larger and less slender, convex, polished, black, the abdomen

not paler at tip, the legs pale, the antennae dusky testaceous, the elytra translucent, pale flavate, gradually blackish toward base; head but slightly elongate, gradually broader to the rather narrowly rounded basal angles, the sides just visibly arcuate, the punctures not very coarse but deep, moderately close-set, wanting along the middle as usual; post-ocular flattened line distinct, closely and confusedly punctate, the punctures of the under surface small but strong, sparsely distributed, obsolescent basally; prothorax elongate, slightly narrower than the head, the dorsal series of 10–12 moderate, rather close-set punctures, the sublateral long and of nearly as many, with some others externally and anteriorly; sides distinctly converging and straight, the angles not very broadly rounded; elytra elongate, barely as long as the prothorax but evidently wider, the punctures numerous, broadly confused toward the suture, more or less lineate thence to the lower margin of the flanks, the first series deepest and most regular; abdomen at base much narrower than the elytra, gradually broadening behind, finely, sparsely punctulate. Length 4.7–5.0 mm.; width 0.75–0.8 mm. New York (Long Island), New Jersey and Iowa. [=*seriatus* Lec.] .... **flavipes** Lec.

Body small, slender, convex, polished, deep black throughout, the elytra scarcely visibly picescent; legs very dark rufous, the antennae blackish; head formed nearly as in *flavipes* but smaller and with rather more broadly rounded basal angles, the punctures strong and deep, though only moderately coarse and somewhat sparse toward the sides, almost equally strong beneath, tending to form two longitudinal series at each side, very inconspicuous medially and basally, the post-ocular flattened line biserially and rather strongly punctate; prothorax slightly elongate, fully as wide as the head, with the apical angles very broadly rounded, the sides thence moderately converging and nearly straight posteriorly; punctures of the dorsal series 8–10 in number, not very coarse but distinct, rather less numerous in the sublateral series, with a few isolated near the apical angles as usual; elytra elongate, longer and much wider than the prothorax, the punctures rather fine but distinct, forming equidistant and subeven series throughout the width, except very near the suture, the series on the upper convexity of the flanks usually most close-set; abdomen slightly narrower than the elytra, parallel, sparsely and feebly punctulate. Length 3.6–3.9 mm.; width 0.65–0.68 mm. Iowa, Wisconsin (Bayfield) and California (San Francisco). **nigritulus** Lec.

g — Form rather more slender than in *flavipes*, the size almost similar, highly polished throughout, the head black; abdomen very dark, the entire elytra paler, piceous, the prothorax and legs pale testaceous, the antennae darker, rufous; head well developed, slightly elongate, gradually and moderately broadening toward base, with the sides straight and the angles broadly rounded; punctures coarse and deep, somewhat close laterally, smaller but distinct and sparsely scattered on the under surface, which becomes impunctate toward the suture posteriorly and throughout the width in basal two-fifths, the post-ocular flat line distinct, confusedly and strongly, somewhat closely punctate throughout; prothorax distinctly elongate, obviously narrower than the head, the apical angles obtuse but not much rounded, the sides parallel and

straight thence to apical two-fifths, then distinctly converging to the base; punctures rather coarse, deep and approximate in the series, the dorsal of 11–12, the sublateral of 7–8, both unusually regular; there is also a coarse isolated puncture near the sides anteriorly; elytra elongate, longer and much wider than the prothorax, strongly punctured in even series throughout, except rather broadly and gradually more densely toward the suture; abdomen as in *nigritulus*. Length 5.2 mm.; width 0.76 mm. Colorado (Denver),— H. F. Wickham.
lustrans n. sp.

Testaceous, shining, the head and abdomen darker; head convex, elongate, slightly wider behind, coarsely and sparsely punctured toward each side, the frontal grooves long and deep; antennae not longer than the head; prothorax a third longer than wide, slightly narrowed behind, the base and apex rounded; dorsal series of six punctures, also with a curved sublateral row as usual; elytra distinctly punctured in series; abdomen sparsely and feebly punctulate. Length 2.2 mm. California (Fort Yuma)....................................**pallidulus** Lec.

I am unable to distinguish between the specimens in my cabinet, which were carefully compared with the original types of *flavipes* and *seriatus* and believe that they represent but one species. This is undoubtedly the form which has been identified as the European *batychrus*, but it is not the same, being much larger in size and of heavier build; it is however very closely allied to *batychrus*.* The species described by

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* Under the name *batychrus*, I have lately received two distinct species from Mr. Reitter, one of which seems to be undescribed; it may be outlined as follows: —

Form very slender, only moderately convex, parallel, shining, the head deep black, the prothorax black anteriorly but gradually shading into a blackish-piceous posteriorly, the abdomen piceous and the elytra pale, diaphanous, flavate, shaded blackish toward base and narrowly toward the suture nearly to the tip; legs pale, the antennae dusky testaceous; head narrow, decidedly elongate, the sides very feebly diverging behind the eyes and straight for a long distance to the rounded basal angles; punctures small but deep, close-set toward the sides, the under surface finely strigilate, finely and sparsely punctate, the post-ocular line finely, closely and confusedly punctate, impunctate near its upper margin; prothorax narrow, much elongated, not quite as wide as the head, with dorsal and sublateral series of many small but distinct, close-set punctures, with a patch of confused punctures externally toward apex; elytra elongate, as long as the prothorax and evidently wider, punctured in even series except toward the suture; abdomen narrow, parallel, feebly punctulate. Length 3.8 mm.; width 0.58 mm. Europe (Caucasus)..**perexilis** n. sp.

Differs from *batychrus* in its much more slender form, narrower and more elongate head and prothorax and more linearly punctate elytra.

LeConte under the name *Leptacinus pallidulus* may or may not belong to this genus, as I have not been able to study it carefully; the very small size of the species renders the generic reference somewhat doubtful. The single specimen of *nigritulus* which was taken by the writer in the environs of San Francisco, is probably a fortuitous importation from the eastern part of the country, and whether or not it has since established itself in California is unknown to me at present.

Stictolinus n. gen.

We arrive here at a succession of genera differing rather conspicuously from any of those previously described, in having the pronotal punctures confused toward the sides, and, accompanying this peculiarity, there is a general loss of the flattened longitudinal line behind the eyes, although a vestige of it may be traced occasionally, as in the genus *Hesperolinus*, where its upper margin exists as a polished convex impunctate edge from the eyes to the basal angles. In the present genus there is scarcely a trace of the flattened line and the flanks of the head are convex from the upper to the under surface and continuously and evenly punctured. *Stictolinus* has the punctures more numerous and close-set than most of those that follow, with a narrower impunctate line along the middle of the head. The fourth palpal joint is usually a little longer than the third, very finely and gradually pointed but thicker at base or more conical than in *Leptacinus* and more like that of *Leptacinodes;* it is also rather strongly oblique as in that genus. The genus is peculiar in having no trace of the usual oblique ocular frontal grooves, but the median pair are impressed and distinct though rather short. The elytral punctures are confused in arrangement over the entire surface, except one regular series of more close-set punctures along the upper margin of the deflexed flanks, which series is bordered internally by an even, highly polished, impunctate line throughout the length; the punctures are generally somewhat more closely aggregated toward the suture and sparser on the median parts, where there is sometimes a feeble suggestion of serial arrangement toward base. There is no trace of strigilation on the polished surfaces of the anterior parts and the gular sutures are as in *Leptacinus* and *Leptacinodes*. We have at least four species, which may be readily separated as follows: —

Last joint of the maxillary palpi as long as the third or longer............2

Last joint distinctly shorter than the third; size larger.....................4

2 — Head large, the prothorax relatively smaller, very conspicuously narrower than the head; body slender, moderately convex, polished, black, the abdomen not paler at tip, the elytra rather distinctly, the prothorax more feebly, picescent; legs pale, the antennae blackish; head large, behind the antennae distinctly elongate, the sides parallel and nearly straight, the basal angles broadly rounded, the punctures strong and very close-set throughout, the median smooth line very narrow, subobliterated toward base, the under surface rather less strongly and less densely punctate; prothorax small, elongate, with the sides rather feebly converging posteriorly throughout and straight or feebly arcuate, the angles obtusely but not very broadly rounded; punctures similar to those of the head but somewhat less close-set, the broad median smooth line clearly and evenly delimited; elytra longer than wide, somewhat shorter than the prothorax but distinctly wider though not quite as wide as the head, the punctures fine but deep, rather close-set, the punctuation broadly confused toward apex and suture; abdomen parallel, minutely, rather inconspicuously punctulate. Length 4.5 mm.; width 0.78 mm. California (coast regions north of San Francisco).

grandiceps Lec.

Head moderately developed, never more than slightly broader than the prothorax, the latter relatively larger, similar in coloration to *grandiceps* but with the prothorax and elytra about equally, and both feebly, piceous, the former sometimes rather paler........................3

3 — Elytra only slightly shorter than the prothorax; body parallel, similar in form and sculpture to *grandiceps* but with the head rather more elongate behind the antennae, the prothorax similar in form but less closely punctate, particularly toward base; elytra and abdomen relatively stouter, similarly sculptured. Length 4.5–5.0 mm.; width 0.75–0.8 mm. California (Truckee and Siskiyou Co.)........**aequalis** n. sp.

Elytra much shorter than the prothorax; body very slender, parallel, black, the elytra and prothorax more or less distinctly piceous in color, the legs pale as usual; head moderate in size, distinctly elongate behind the antennae, the sides parallel and very feebly arcuate, the basal angles well rounded; punctures strong and dense, giving an opaque appearance, the median smooth line very narrow; prothorax well developed, narrower and more elongate than in *aequalis* but otherwise similar, still less obviously narrower than the head, the punctures strong and usually close-set but uneven in distribution; elytra and abdomen much more slender than in *aequalis*, the former somewhat longer than wide but only just visibly wider than the prothorax, distinctly and rather closely punctured as usual. Length 3.8–4.5 mm.; width 0.55–0.65 mm. Massachusetts, New York and Pennsylvania to Iowa and Wisconsin (Bayfield)..**scolopacea** n. sp.

4 — Body much stouter than in the preceding species, black, the elytra feebly piceous, the prothorax scarcely visibly less than black; legs pale, the antennae blackish; head well developed, evidently elongate behind the antennae, the latter distinctly longer than the head; sides subparallel and nearly straight, the basal angles rounded; punctures rather fine but deep, only moderately dense, separated by about their own diameters; prothorax less elongate, with the sides rather strongly converging, distinctly narrower than the head, the punctures fine but deep and less close-set than usual; elytra large, longer than wide, fully as long as the prothorax and much wider, obviously wider than the head, the punctures small but deep, close-set and confused almost throughout; abdomen parallel, finely and inconspicuously punctulate. Length 5.4 mm.; width 0.9 mm. California (Lake Co.), — Chas. Fuchs.
franciscanus n. sp.

The rather small and monotonous members of this genus may prove to be rather numerous in the colder parts of the Pacific coast faunal province, largely replacing the genus *Hesperolinus*, which is somewhat more developed in the southern coast region. The eastern *scolopacea* is abundant and widely diffused but appears to have been overlooked by the older authors.

Habrolinus n. gen.

The single very small and slender species constituting this genus bears considerable superficial resemblance to the eastern *Nematolinus longicollis*, especially in its strongly incrassate antennae, with very transverse and compactly joined distal joints and elongate second joint, but, besides the distinguishing character of the maxillary palpi, the present genus differs in having the prosternum before the coxae as in all the preceding genera of this subtribe and not narrowed by the intrusion of the somewhat dilated anterior part of the hypomera, characterizing, if not peculiar to, *Nematolinus* and *Lithocharodes*. It seems necessary therefore to propose a separate genus for this obscure though interesting form. The virtually obsolete median frontal grooves and correspondingly distinct and conspicuous oblique ocular grooves, constitutes a very remarkable feature. The prosternum is gradually strongly tumescent toward the median line. The type may be described as follows: —

Body very slender, convex, shining, absolutely parallel, all the segments being equal in width, the head perhaps just visibly wider, pale and almost uniform testaceous throughout, the legs and antennae concolorous; head longer than wide, the sides parallel, the basal angles very broadly rounded; flanks evenly convex, without trace of flattening behind the eyes, the latter well developed as usual; punctures minute, sparse and inconspicuous, rather stronger but still sparser beneath, the under surface very obsoletely strigilate, the space between the sutures polished and sculptureless; antennae one-half longer than the head, the basal joint three-fifths as long as the remainder; prothorax elongate, with the sides almost parallel and very feebly arcuate, gradually rounding anteriorly to the apex, the angles almost obliterated; base arcuately subtruncate, with the angles much less rounded; side margins strongly acute to the apex; punctures coarser than those of the head but still sparser; elytra small, fully as long as wide, very much shorter than the prothorax but of equal width, the punctures fine but strong, evenly and rather sparsely distributed throughout, without trace of lineal arrangement; abdomen at base as wide as the elytra, gradually very slightly wider thence to the fifth segment, which is unusually elongate, almost equaling the two preceding combined, the surface unusually convex throughout and duller than the rest of the upper surface, being minutely but strongly reticulate, also finely but asperulately and sparsely punctate. Length 3.7 mm; width 0.6 mm. California (Lake Tahoe).
tahoensis n. sp.

It is possible that this species may occur under pine bark, though I made no notes relating to its capture.

Nematolinus n. gen.

This genus and the next constitute a rather isolated group, having the prosternum narrower between the anterior parts of the hypomera and strongly incrassate and compact antennae; in the latter, however, as well as in the form of the maxillary palpi, they both agree with the preceding genus, which might with propriety be placed in the same group. In the present genus the frontal grooves are all but completely obsolete and the oblique ocular lines, unlike those of *Habrolinus*, are wholly obsolete. The gular sutures are peculiar, being feebly arcuate, widely separated anteriorly and gradually approaching each other, not becoming very approximate except just before the base, the intermediate surface polished and impunctate. The sculpture of the head also seems to be confined to the genus, there being on the interspaces of the under surface a system of close-set but unevenly distributed exceedingly minute nude punctules, visible toward the sutures only and sometimes almost obsolete; on the upper surface these densely aggregated punctules, which are entirely distinct from the ordinary punctures, form two very large subopaque patches involving the entire anterior half and separated by a smooth polished line. The antennae are very similar to those of *Habrolinus* and the maxillary palpi are of the same type as in that genus and the one following, except that here and in *Lithocharodes* the third joint is more developed, the oblique fourth joint being relatively much shorter. The abdomen in *Nematolinus* is not minutely reticulate but is unusually punctate. The head is completely unmodified and evenly convex behind the eyes throughout, in which character it differs somewhat from *Lithocharodes*. *Nematolinus* is evidently closely allied to *Somoleptus* Shp., of the neotropics, but appears to differ in the system of cephalic and elytral sculpture, and, as the rather numerous species of *Somoleptus* described by Dr. Sharp will ultimately prove, in all probability, to be assignable to several genera, I leave *longicollis* Lec., in the special genus here proposed for it. The tibiae in *Nematolinus* are certainly spinulose to some extent, whereas in *Somoleptus* the legs are said to be slender and destitute of spinules. Our single species is of wide northern range, apparently not occurring in the subtropical parts of the country and may be characterized as follows:—

Very slender, moderately convex, parallel, polished, pale piceous, the head somewhat darker, the legs and antennae pale; head elongate, subparallel or feebly enlarged toward base, with the angles very broadly rounded, the punctures fine but strong and rather close-set; antennae much longer than the head, the basal joint evidently more than half as long as the remainder; prothorax one-half to three-fifths longer than wide, just visibly narrower than the head, the sides almost evenly arcuate from the neck to behind the middle, then very feebly converging and straight to the moderately rounded basal angles, the punctures fine but deeply impressed and close-set; elytra slightly longer than wide, much shorter but evidently wider than the prothorax, minutely, evenly and somewhat closely punctate, the punctures arranged without order;

abdomen subparallel, slightly narrower than the elytra, finely but strongly, asperately and closely punctured throughout, the fifth segment subequal to the two preceding combined. Length 3.2–4.2 mm.; width 0.6–0.68 mm. Rhode Island and Pennsylvania to Iowa and Missouri.
longicollis Lec.

There may be some subspecies of the type form represented among the numerous specimens before me, but I have been unable to definitely limit them. Some examples have virtually no minute ground sculpture on the under surface of the head, while in two specimens from Missouri this sculpture is very conspicuous. LeConte states that the species is usually found in ants' nests, but it is apparently not a true inquiline.

Lithocharodes Shp.

In most of its characters, including palpal structure, this genus is allied closely to the two preceding as before intimated, but there are several features which strongly differentiate it from either of them. The antennae, though compact and strongly incrassate distally, have the third joint unusually elongate as well as the second, a departure in the direction of *Leptolinus*, and, behind the lower part of the eyes, there is a longitudinal area which is unmistakably flattened as in *Gyrohypnus* and allies, although here the area is not so distinctly defined; again, the acute lateral margin of the prothorax is strong and distinct to the apex in *Nematolinus* but here it gradually becomes very feeble anteriorly though not obliterated as is the case in *Leptolinus*. The gular sutures differ greatly from those of the two preceding genera in rapidly approaching each other and becoming parallel and very approximate from a point before the middle to the base. The integuments are highly polished, without minute ground sculpture to any noticeable extent, the third palpal joint of the same general form as in the two preceding genera, but the fourth joint is relatively shorter, oblique and acutely pointed though evidently conical and not extremely slender and aciculate, and the anterior angles of the prothorax are not obliterated. The median frontal grooves are moderately developed and much more distinct than in either of the preceding, and, in this as well as the more conical fourth palpal joint, it leads gradually to the two following genera; the oblique ocular grooves are obsolete as in *Stictolinus*. *Lithocharodes* is widely distributed in the tropical and subtropical regions of North America, from southern Louisiana to South America. From Nicaragua it is represented in my cabinet by a species closely allied to *ruficollis* but with much sparser punctuation, named *fuscipennis* by Sharp, — (Tr. Ent. Soc. Lond., 1876, p. 205). It was described originally from the Amazons, but is widely distributed and the type of the genus.

Dr. Sharp seems to have mistaken the female sexual characters in this genus for male, in remarks in the Biologia under such Central American species as *spinigera* and *armata*. The more acute abdominal apex characterizes the female, the more obtuse the male. The species are numerous but only three have thus far occurred within our extreme southern limits; these may be distinguished as follows: —

Elytra and abdomen more or less pale piceous in color, the prothorax and legs paler and the head and antennae dark, rufo-testaceous; body larger and rather stouter, subparallel, somewhat convex, polished throughout; head large and elongate, very gradually dilated toward base, with the sides feebly arcuate, the angles broadly rounded; punctures not very large but deep and close-set, with a narrow median smooth line, rather coarser and less close-set but conspicuous on the under surface, which is not reticulate or strigilate; antennae somewhat longer than the head, with the basal joint almost three-fourths as long as the remainder; prothorax one-half longer than wide, very much narrower than the head, the sides from the rounded anterior angles to the base very strongly converging and nearly straight; punctures rather small but deep and distinct, somewhat close-set; elytra elongate, evidently shorter but wider than the prothorax, narrower than the head, the punctures fine, uniformly but nonserially, rather closely distributed throughout; abdomen narrower than the elytra, parallel, polished, minutely and rather closely but inconspicuously punctured throughout, the fifth segment much shorter than the two preceding combined as usual. Length 5.8 mm.; width 0.8 mm. Texas (Austin).
pallidus n. sp.

Elytra and abdomen black to piceous-black, the head and prothorax paler though dark piceo-rufous; legs very pale, the antennae more dusky, rufous; body rather smaller and notably more slender than in *pallidus*; head narrower, relatively more elongate behind the antennae, somewhat more coarsely and closely punctured, with a narrow impunctate median line; antennae stout distally, the third joint elongate but evidently shorter than the second; prothorax narrower, much elongated, the sides quite as strongly converging posteriorly but more parallel anteriorly, distinctly narrower than the head as well as the elytra, similarly punctured; elytra elongate, shorter but distinctly wider than the prothorax, equal in width to the head; abdomen at base narrower than the elytra, the sides straight, gradually diverging to the fifth segment which is as wide as the elytra or head, finely, rather sparsely punctulate. Length 5.0 mm.; width 0.68 mm. Louisiana................**nigripennis** Lec.

Elytra and abdomen piceous-black to black, the hind margin of the former pale testaceous for a fifth or sixth of the length, the prothorax and legs very pale, the head and antennae dark, testaceous; head less developed, elongate, gradually broader toward base, the angles broadly rounded; punctures rather fine but deep and very close-set; prothorax nearly as in *pallidus*, but rather less elongate and less evidently narrower than the head, the sides equally strongly converging posteriorly, the angles equally rounded, the punctures very fine and notably sparser; elytra elongate, evidently shorter and much wider than the prothorax, the punctures very fine and sparse, not at all serial; abdomen nearly as in *nigripennis*. Length 3.7–4.5 mm.; width 0.63-0.7 mm. Texas (Galveston) and Louisiana...............................**ruficollis** Lec.

None of my examples of *pallidus* have the elytra darker than a rather pale piceo-testaceous tint and similar in color to the abdomen, and the species differs in this way from *nigripennis*, as well as by its larger size, rather stouter form and larger and broader head.

Hesperolinus n. gen.

The third joint of the maxillary palpi resumes here its usual form, being slightly thickened apically and narrowed basally, less compressed than in the three preceding genera and more elongate, the slender though evidently conical fourth joint being about one-half as long as the third, and strongly oblique in insertion. As in the preceding genus there is a suggestion of the flattened longitudinal line behind the eyes, which is here tolerably well defined above by the convex polished post-ocular line but very indefinitely so along its lower margin. The prosternum also resumes its usual wide unconstricted form, the hypomera being normally narrow anteriorly and the lateral edge of the pronotum is fine but distinctly acute to the tip. The antennae are nearly of the type prevailing in *Gyrohypnus* and *Xantholinus*, the gular sutures as in the former of those genera and the medial and ocular frontal grooves are all evident, although the median pair are much shorter and feebler than in *Gyrohypnus*. The neck is notably narrower than in that genus, being but little more than a fourth as wide as the head. The punctures are usually small but distinct and rather close-set on the head, those of the elytra being fine and evenly spaced, though irregularly arranged throughout. The remarkable sexual characters of the female have been alluded to by the writer (Bull. Cal. Acad. Sci., 1886, p. 261 and plate), that sex having the sixth ventral prolonged into a very slender spine curving upward beyond the tip of the abdomen in at least two species alluded to below, and, leading up to this peculiar formation, it may be stated that in the genus *Nematolinus*, described above, as well as in *Hesperolinus piceus*, the female has the tip of the sixth ventral strongly and acutely angulate, it being broadly rounded or parabolic in the male, as is also the case in the present genus as a rule. The females seem to be much less abundant than the males. The species of *Hesperolinus* are rather numerous on the Pacific coast, those at hand being separable by the following characters: —

Second antennal joint subequal in length to the third, both distinctly elongated; female usually with the sixth ventral prolonged into a slender spine 2
Second antennal joint evidently longer than the third, elongate, the latter sometimes much abbreviated; female having the sixth ventral slightly prolonged and acutely angulate at the middle, at least in *piceus* 6
2 — Male having the apex of the sixth ventral broadly subangulate, with the angle broadly rounded and not noticeably produced 3
Male having the apex of the sixth ventral more or less narrowly and strongly lobed in the middle, the lobe evenly rounded at tip 5
3 — Prothorax dark in color, black or blackish, always darker than the elytra. Body rather stout, subparallel, blackish-piceous in color, the head black and the elytra generally slightly paler, piceous; antennae dusky, the legs paler, rufous; integuments shining; head well developed, much longer than wide behind the antennae, the sides parallel and nearly straight or feebly diverging basally, the angles broadly rounded; punctures not very coarse but deep, close-set and conspicuous, still denser toward the eyes, rather narrowly wanting along the middle, smaller but close-set on the under surface and flanks, the convex longitudinal post-ocular line distinct; antennae but little longer

than the head, stout, the subapical joints transverse; prothorax narrow, fully one-half longer than wide, very much narrower than the head, the sides rather strongly converging, the angles distinct but rounded, the punctures fine and rather sparse; elytra somewhat elongate, barely as long as the prothorax but much wider, rather wider than the head, finely, evenly, rather sparsely and irregularly punctate; abdomen but little narrower than the elytra, much wider than the prothorax, minutely, sparsely punctulate toward the sides. *Female* with the sixth ventral medially prolonged into a very slender spine curving upward behind the abdomen, with its tip very fine and not at all expanded. Length 6.4 mm.; width 0.92 mm. California (Sonoma to Monterey). [= *brunnescens* Lec.]....................... **parcus** Lec.

Prothorax pale in color, either partially or wholly...................... 4

4 — Body smaller and more slender, moderately convex as usual, the head and abdomen deep black, the latter not paler at tip, the elytra rather pale and uniform piceous-brown throughout, the prothorax pale testaceous, clouded with a blackish oblique streak from the centre to each apical angle and more narrowly along the median line posteriorly for a short distance; legs pale, the antennae dark, rufous; head moderate in size, parallel, the sides feebly arcuate, the angles broadly rounded; surface behind the antennae but little longer than wide, deeply and perforately, not very coarsely but closely punctate, the median impunctate line rather wide, the under surface similarly but less closely punctured; post-ocular polished line distinct; antennae only moderately thick; prothorax scarcely a third longer than wide, much narrower than the head, the sides straight and only feebly converging, the apical angles distinct and but narrowly rounded; punctures small but very strong and distinct, more or less sparse and irregular in distribution, sometimes unevenly lineate in arrangement, especially toward base; elytra much elongated obviously longer and much wider than the prothorax, wider than the head, finely but unusually strongly, rather sparsely and unevenly punctured; abdomen but little narrower than the elytra, inconspicuously and sparsely punctulate. *Female* unknown. Length, 5.5 mm.; width 0.82 mm. California (southern), — H. C. Fall.

bicolor n. sp.

Body much larger and stouter, subparallel, convex, shining, pale testaceous in color throughout, the legs concolorous, the antennae slightly darker, the abdomen sometimes slightly piceous and the head occasionally with an indefinite blackish vertexal cloud; head well developed, subparallel or feebly dilated basally, with the angles well rounded as usual; antennae thick; punctures not very coarse but perforate, close-set and conspicuous, the median impunctate line decidedly narrow; under surface strongly but rather sparsely punctured, the basal half impunctate; obtuse polished line behind the eyes distinct and normal; prothorax nearly one-half longer than wide, much narrower than the head, the sides distinctly converging throughout and nearly straight, with the apical angles obtuse but distinct and slightly rounded; punctures fine but rather strong, unevenly distributed, irregular, sparse basally, denser apically; elytra about as long as wide, much shorter but somewhat distinctly wider than the prothorax, equal in width to the head, finely but strongly, rather closely and unevenly punctate; abdomen almost as wide as the elytra, finely, rather sparsely punctulate. *Female* unknown. Length 6.8 mm.; width 1.0 mm. Nevada (Reno)................**alticola** n. sp.

5 — Moderately large and stout, piceous-brown, the elytra notably paler, the head black; legs very pale piceous, the antennae fusco-testaceous; head slightly dilated toward base with the sides broadly arcuate, much longer than wide behind the antennae, the basal angles broadly rounded; neck fully one-third as wide; antennae and punctuation nearly as in *parcus*, the latter rather less close-set; prothorax two-fifths to one-half longer than wide, much narrower than the head, the punctures strong and rather close-set, somewhat sparser posteriorly; sides rather strongly converging and almost straight, the angles obtuse and well rounded; elytra elongate, as long as the prothorax but much wider, somewhat wider than the head, the punctures fine but strong, rather sparsely and evenly distributed without order throughout; abdomen gradually slightly wider from base to apex, the former much narrower than the elytra, the punctulation fine and inconspicuous, the surface polished as usual; apices of the segments beneath nubilously paler. *Female* with a long and very slender spine projecting from the middle of the sixth ventral and curving upward behind the end of the abdomen as in *parcus*, except that here the tip of the spine is minutely expanded, with the apex of the enlargement truncate, and not aciculate as it is in that species. Length 6.0 mm.; width 0.85–0.88 mm. British Columbia (Victoria),— H. F. Wickham............................**borealis** n. sp.

Much smaller and more slender, parallel, polished throughout, the head paler, the abdomen darker, piceous, the later almost black and not paler at tip, the prothorax, elytra and legs pale rufous, the antennae dusky testaceous; head behind the antennae distinctly elongate, parallel with the sides nearly straight, the angles well rounded as usual; punctures moderately coarse, perforate, close-set laterally, gradually sparser medially, the impunctate line rather broad, smaller but deep and sparser beneath and wanting toward base, the tumescent polished line behind the eyes distinct as in the preceding species; antennae only moderately stout and distally incrassate, much longer than the head; prothorax one-half longer than wide, much narrower than the head, the sides moderately converging and nearly straight, the angles obtuse and rounded; punctures distinct but sparse, very irregularly distributed; elytra small, longer than wide but obviously shorter than the prothorax and slightly wider, not quite as wide as the head, the punctures unusually strong and only moderately sparse; abdomen fully as wide as the elytra, feebly and sparsely punctulate. *Female* wanting, the lobe of the sixth ventral in the male much more narrowly rounded than in *borealis*. Length 4.7 mm.; width 0.68 mm. California (Los Angeles Co.), — H. C. Fall....................................**pomonae** n. sp.

6 — Sixth ventral of the male reduced at the middle in a rather narrowly rounded lobe; pronotal punctures rather coarse and conspicuous though very sparse and almost wholly wanting near the sides toward base. Body very slender, parallel, shining, rufo-piceous in color, the head and most of the pronotum, as well as the abdomen, frequently blackish, the elytra always paler; legs pale, the antennae dusky; head

moderate in size and elongation, subparallel, the sides feebly arcuate, the angles rounded; antennae much less developed than in *piceus* and less thickened, the third joint obconical and less conspicuously shorter than the second; punctures rather small and unusually sparse above and beneath, the polished punctureless post-ocular line well developed; prothorax scarcely two-fifths longer than wide, noticeably narrower than the head, the sides strongly converging and nearly straight throughout, the apical angles obtuse but very distinct and only slightly rounded; punctures somewhat larger than those of the head; elytra but little longer than wide, obviously shorter than the prothorax but distinctly wider, scarcely visibly wider than the head, the punctures strong like those of the prothorax and rather sparse; abdomen about as wide as the elytra, inconspicuously and very sparsely punctulate. *Female* unknown. Length 4.6–5.1 mm.; width 0.68 mm. California (San Diego Co.,— Coronado)...... **angustus** n. sp.

Sixth ventral of the male broadly and feebly angulate at tip, the angle broadly and obtusely rounded; pronotal punctures very fine, sparse and inconspicuous. Body very slender, subparallel, shining, dark rufopiceous throughout, the head black; legs pale, the antennae dark, rufous; head distinctly elongate, very feebly inflated toward base with the sides somewhat arcuate, the angles very broadly rounded; punctures strong and very close-set laterally, wanting along the middle, the post-ocular polished line distinct; under surface strongly, rather closely punctured, subimpunctate basally; antennae notably thick, much longer than the head in the male, less conspicuously so in the female, the third joint of the former not quite as long as wide, obtrapezoidal with rounded sides, about as long as wide in the latter sex; prothorax small, much narrower than the head, elongate, the sides feebly converging posteriorly, the apical angles very broadly rounded and almost completely obliterated; elytra small, quadrate, a little shorter but much wider than the prothorax, rather distinctly wider than the head, finely, sparsely and inconspicuously punctate; abdomen toward tip as wide as the elytra, a little narrower toward base, very finely, sparsely punctulate. *Female* with the apex of the sixth ventral produced and very acutely angulate at the middle, the surface at the angle bearing a small dense tuft of recumbent pale hairs. Length 4.6–5.2 mm.; width 0.75 mm. California (Siskiyou Co.)... **piceus** n. sp.

In the male of *piceus* the third joint of the maxillary palpi becomes somewhat shorter and more strongly thickened apically than usual, with the fourth joint normal in form but correspondingly elongate, being about three-fourths as long as the third; this, coupled with the almost obsolete apical angles of the prothorax, notably short third antennal joint and pointed, rather than spinose, sixth ventral of the female, seems to indicate a subgeneric departure in the direction of *Habrolinus*, but, at the same time, the female of *piceus* seems to have almost normal maxillary palpi, which may prove that these organs are malformed in the single male before me, for it does not seem possible to assume any specific difference between the assumed male and female described above. I cannot distinguish *parcus* Lec., from the subsequently described *brunnescens*, and have therefore placed the latter in synonymy.

Leiolinus n. gen.

While agreeing closely with *Hesperolinus* in general structure of the head, antennae and palpi, and especially in possessing the same polished and impunctate convex longitudinal line behind each eye, this genus departs in so many characters and particularly in its much larger but even prosternum, wholly devoid of any trace of the medial carina so conspicuous in *Hesperolinus*, that there can be but little doubt of its real generic isolation. The third and fourth palpal joints, in regard to their relative lengths, are nearly as in the preceding genus, but here the fourth joint is inserted more axially and appears to be only feebly oblique; the frontal and ocular grooves of the head are nearly similar but the antennae are longer, looser and more slender, and the sculpture throughout is very minute and feeble, in marked contrast to *Hesperolinus*. The head above and beneath is very minutely strigilate in wavy lines, which are partially disintegrated into fine reticulations; the pronotum is less finely but usually more feebly strigilate in more entire wavy lines, the elytra smooth and polished between the punctures, which are small but strong, evenly though unsystematically distributed and rather close-set and the abdomen is minutely but rather strongly and very closely strigilate in wavy transverse lines, the punctures being very minute, sparse, feeble, evenly distributed and transversely sublineate in form. The gular sutures are arcuate, widely separated anteriorly, but, well before the middle, become extremely approximate and parallel to the base; they are excessively fine and feeble. In the form of the posterior margin of the prosternum beneath the coxae, *Leiolinus* stands alone in the tribe as far as I have been able to observe. There are two species represented in the material before me, readily separable as follows: —

Form stouter; antennae with the second and third joints relatively more slender and much more elongate, equal in length, the third much longer than wide, very strongly obconic and only half as wide at base as at apex; body piceous-black, the head deep black, the elytra paler piceous and the legs somewhat paler, the tarsi pale; antennae dusky rufous, much longer than the head, scarcely at all incrassate distally, with the basal joint about as long as the next three combined, the tenth but slightly transverse; head well developed, much elongated behind the antennae, only moderately convex, very feebly dilated toward base with the sides nearly straight, the angles broadly rounded and the eyes small; neck but little more than a fourth as wide as the head; punctures vely fine and well separated, wanting along the median line as usual, still finer, sparser and very inconspicuous on the under surface; polished convex edge behind the eyes rather prominent; prothorax fully one-half longer than wide, distinctly narrower than the head, the sides rather strongly converging and nearly straight throughout, the apical angles distinct and narrowly rounded; punctures fine but distinctly impressed, sparse, uneven in distribution; elytra scarcely visibly longer than wide, somewhat shorter than the prothorax but much wider and evidently wider than the head; abdomen parallel, but little narrower than the elytra. Length 8.0 mm.; width 1.15 mm. Utah (southwestern), — Weidt.......................................**uteanus** n. sp.

Form more slender and parallel, polished, almost uniform piceous-brown throughout, the legs but little paler with the tarsi pale yellow, the antennae dark piceo-rufous, shorter and thicker than in *uteanus* though still evidently longer than the head, the second and third joints less elongate and relatively much thicker, equal in length, the third but very slightly longer than wide and much less strongly and evenly obconic than in the preceding, the basal joint shorter and thicker but, in like manner, equal in length to the succeeding three combined; head relatively broader and not so evidently elongated behind the antennae, just visibly dilated basally, the angles more broadly rounded than in *uteanus*, the punctuation almost similar but sparser, almost effaced on the under surface; prothorax shorter and broader, the sides and punctures almost similar, distinctly narrower than the head, with the apical angles more broadly rounded; elytra much narrower than in *uteanus*, distinctly elongate, nearly as long as the prothorax but only slightly wider and barely as wide as the head; abdomen parallel, about as wide as the elytra. Length 7.8 mm.; width 1.0 mm. Nevada (Elko), — H. F. Wickham...**tarsalis** n. sp.

In both of the unique types of the above species the sixth ventral is very broadly and obtusely, parabolically rounded at tip and they are in all probability males. The acute side margin of the prothorax continues to the apex but becomes very feeble anteriorly, in this character leading onward to the next genus, where the side margin differs from that of any of the preceding genera in becoming wholly obliterated anteriorly.

Leptolinus Kr.

This genus differs greatly from any of those which precede in having the anterior tarsi very strongly dilated and clothed beneath with a dense whitish pubescence, and it may be distinguished also by the density of the sculpture, particularly of the head, where even the polished impunctate median area of the other genera disappears; the abdomen is rendered alutaceous by the close-set minute punctulation. The prosternum is long in front of the coxae as in *Leiolinus* and is not carinate, though feebly tumid at the middle posteriorly, and is somewhat narrowed by the hypomera anteriorly reminding us of *Lithocharodes*. The female differs but little from the male in general appearance, though usually rather smaller and with the elytra relatively somewhat more elongate, but the third antennal joint is slightly shorter than the second and about as long as the next two combined and the sixth ventral is rather strongly but evenly parabolic at tip; in the male that segment is transversely truncate, and, as usual in most of the preceding genera, the male is much more abundant than the female. The very narrow interstices between the punctures of the under surface of the head are rendered somewhat dull by a very minute reticulation, which, on the upper surface as well as on the pronotum, assumes the form of very fine and obsolescent wavy longitudinal strigilation; the abdomen is minutely, closely and more strongly strigilate in wavy lines which have the usual transverse direction. Our single species may be described as follows: —

Form subparallel, only moderately convex, black, the abdomen piceous along the side margins; elytra bright red, black along the basal margin throughout the width; legs very pale, the antennae only slightly less pale, rufous throughout; head large, oblong, much elongated behind the antennae, the sides parallel and very slightly arcuate, the surface dull and very strongly, densely punctate, the punctures elongate and somewhat interlacing above, almost equally dense but more even be-

neath; antennae much longer than the entire head, the basal joint alone exceeding half that length, the outer joints incrassate and compactly joined, the tenth almost twice as wide as long; prothorax nearly three-fourths longer than wide, very much narrower than the head, the sides only feebly converging, the apical angles broadly rounded, the punctures small but deep, circular, close-set but evidently separated, the interspaces polished, the impunctate median line moderate in width and well defined; elytra elongate, equal in length to the prothorax though much wider, but not quite as wide as the head, finely but strongly, unusually closely punctate; abdomen parallel or very nearly so, slightly narrower than the elytra. Length 5.3-6.0 mm.; width 0.8-0.85 mm. Ohio (Cincinnati), Iowa and Texas (Galveston).
rubripennis Lec.

Differs from the European *nothus* Er., in its larger size and somewhat stouter form, larger and more elongate, red elytra, which in that species are much shorter than the prothorax and piceous-black throughout, in its more strongly incrassate antennae with still more elongate basal joint and in the male sexual characters, the tip of the sixth ventral being broadly sinuate toward the middle and not rectilinearly truncate. The apex of the abdomen is rufous in *rubripennis* but not noticeably paler in *nothus.*

Microlinus n. gen.

But little can be said of this genus at the present time, as the original type is a unique in very fragile condition. The description given by Dr. LeConte is as follows: —

Very small, slender, pale yellow, shining; head rather convex, nearly twice as long as its width, smooth, with a few small scattered punctures each side; sides nearly parallel, the base truncate; hind angles narrowly rounded; under surface very sparsely punctured; prothorax not longer or narrower than the head, with a few scattered punctures each side; elytra sparsely, finely punctured, the sutural stria very fine; abdomen sparsely punctured and pubescent. Length less than 2 mm. South Carolina (Columbia), — Dr. Zimmermann............**pusio Lec.**

The remarks under this description state that the palpi, antennae and front tarsi are just as in *Leptolinus rubripennis*, but that whether the middle coxae are separate or contiguous cannot be determined on account of the condition of the type. That the genus is different from *Leptolinus* admits of no doubt, although it is possible that the geographical locality may be erroneous.

Oligolinus n. gen.

The same remark applies to this genus as to *Microlinus*, as stated above, and nothing is known of the unique type beyond that already published by LeConte. The original description is as follows: —

> Subcylindrical, brown, shining, slightly hairy; head twice as long as wide, convex, narrower in front, the base truncate, the hind angles strongly rounded; upper surface distinctly but not densely punctured, with a broad smooth frontal stripe; under surface sparsely, coarsely punctured; antennae paler, a little longer than the head, the outer joints gradually much wider; prothorax as long as the head but not narrower, distinctly but not densely punctured, with a broad smooth dorsal stripe; elytra sparsely punctured, the sutural stria obsolete; abdomen finely, not densely punctulate, the tip and legs paler. Length 2.4 mm. Florida (Enterprise)................................**floridanus** Lec.

Mr. Schwarz, who captured the original type, states that the only specimen of what Dr. LeConte described as *Metoponcus floridanus*, was found by him in the galleries of a *Tomicus* (*Ips*) in the bark of yellow pine in 1875. It was sent to LeConte as a new species of *Leptacinus*, but has never been found again as far as known. All that he can say from recollection is that the species may not be a true *Metoponcus*.

Subtribe **Othii.**

The normal elytral suture, more widely separated antennae and broad and subobsolete epistoma, are the only really important characters distinguishing the Othii from the Xantholini, but here the middle coxae are contiguous and the anterior tarsi dilated as a rule, while in the Xantholini these characters are the marked exception; in addition to this, the sides of the head behind the eyes are never modified as they frequently are in the Xantholini. The sides of the prothorax are nearly as in *Xantholinus* throughout, but the gular sutures are more separated and more deeply impressed as a rule, feebly arcuate and gradually converging to the base of the head, where they are most approximate, though nearly always clearly separated. The anterior tarsi are dilated in all the genera, but to a very variable degree, even within the same genus, and the basal joint of the usually slender hind tarsi is somewhat longer than the second as a rule. The mandibles are grooved externally, short and arcuate in *Othius* and *Othiellus* and straight with arcuate tip in *Baptolinus* and *Parothius*. In the latter two genera the middle coxae seem to be less completely contiguous than in *Othius*, being separated by a thicker longitudinal ridge. The body is parallel and moderately convex in form, with the head well developed in all except *Othiellus*, where it is notably small; the neck is wide throughout, varying from two-thirds the width of the head in *Othiellus* to one-half in *Parothius*. The antennae are generally less densely clothed with fine pubescence beyond the fourth or fifth joint than in the Xantholini, but have longer sparse tactile setae and the basal joint is somewhat shorter, rarely being more than a third as long as the remainder. The frontal grooves are much less developed than in the preceding subtribe and frequently more widely separated, when not obsolete, and the eyes are about equally developed throughout. All the genera have the basal angles of the head rounded and the sides of the prothorax either parallel or much less converging from apex to base than in the Xantholini. The four genera before me may be distinguished by the following characters: —

Fourth joint of the maxillary palpi shorter than the third and evidently narrower at base, acutely conical in form and more or less compressed; mandibles short, thick and arcuate....................................2

Fourth joint not shorter than the third and generally much longer but of nearly similar form, thick at base and gradually acutely conical; mandibles longer, straight externally, finely pointed, arcuate and decussate at apex....................................3

2 — Body parallel, large in size, the frontal grooves obsolete; antennae thick, with the second joint much shorter than the third, both obconical, the anterior tarsi very strongly dilated and densely clothed with white pubescence beneath; labrum truncate, deeply and narrowly cleft at the middle; head very sparsely punctured toward the sides as a rule, with the upper surface, as well as the pronotum and abdomen, very minutely and closely strigilate in transverse wavy lines; prothorax broad, narrowed but little toward base and with two discal punctures obliquely

arranged at each side anteriorly and another at basal two-fifths and lateral fifth, also a few scattered along the lateral and apical margins; elytra somewhat shorter than the prothorax, generally sparsely and irregularly punctured, with the ground sculpture between the punctures consisting of very minute close-set nude punctules; middle coxae very large, closely contiguous. Palaearctic regions................***Othius**

Body very much smaller in size and fusoid, narrowing anteriorly from the elytra, the head much smaller, the frontal grooves short but strongly and broadly impressed, parallel, only moderately separated and distinct, the ocular grooves of the Xantholini represented by a rounded puncture at the upper margin of the eyes; antennae much more slender and relatively longer but with the second and third joints nearly as in *Othius*; anterior tarsi less strongly dilated, similarly clothed beneath; labrum similar; integuments smooth and polished, without minute ground sculpture of any kind, the three setigerous discal punctures at each side of the pronotum as in *Othius*; elytra more developed, being generally much longer and wider than the prothorax, the latter narrower and having the sides parallel and arcuate throughout the length; middle coxae somewhat narrower and not quite so closely contiguous. Palaearctic regions...***Othiellus**

6 —Maxillary palpi shorter, the third joint relatively more thickened toward tip, the fourth joint equal in length to the third, acutely conical; pronotum with two entire dorsal series of about five widely spaced punctures and also a cluster of about three distinct punctures at apical third and lateral fifth; body less stout than in *Baptolinus*, moderately convex, the head and pronotum minutely and transversely strigilate, the elytra without minute ground sculpture, the abdomen very obsoletely and indistinctly strigilate; front broadly impressed at the middle and with two very remotely separated parallel grooves; antennae rather thick, the second and third joints equal in length; neck one-half as wide as the head; prothorax elongate, with distinct though somewhat rounded angles; elytra well developed, each with a deep gutter along the sutural bead; gular sutures deeply impressed, becoming virtually contiguous at base; anterior tarsi broadly dilated and densely spongy-pubescent beneath. Nearctic Pacific coast...**Parothius**

Maxillary palpi longer and more slender, the third joint less swollen toward tip and the fourth much longer than the third, gradually and acutely pointed toward tip; pronotum with a single puncture at each side of the centre of the disk and another at apical fifth or sixth and lateral fifth; body stouter, moderately convex, the head and pronotum with excessively minute or subobsolete transverse wavy strigilation, feebler and finer as a rule than in *Parothius*, the elytra similarly without ground sculpture; front similarly impressed, the parallel frontal grooves nearly similar but feebler or obsolescent; antennae longer, relatively more slender toward base and incrassate toward tip, the second and third joints equal; neck wider, rather more than half as wide as the head; prothorax less elongate as a rule, with more broadly rounded angles; elytra well developed, almost as strongly impressed along the sutural bead; gular sutures similarly strongly impressed but usually rather

less approximate at base; anterior tarsi broadly to moderately dilated, more strongly in the male. Palaearctic and Nearctic regions.
Baptolinus

The foreign genera described in the table may be briefly discussed as follows: —

OTHIUS Steph. — The assumed type of this genus is recorded under the name *fulvipennis* Fab., in the European lists and *grandis* Hochh., and *paralleliceps* Qued., can also be included in all probability. Its species are among the larger and more conspicuous components of the tribe and do not occur outside of the palaearctic provinces as far as known. The shorter and more arcuate mandibles seem to be correlated with the relatively more elongate third joint of the antennae and more abbreviated fourth palpal joint, constituting of *Othius* and *Othiellus* a group not very closely related to *Baptolinus* and *Parothius*. The peculiar ground sculpture of the elytra, consisting of extremely minute, close-set punctules, only visible under rather high power, constitute a really important character in distinguishing *Othius* from *Othiellus*.

OTHIELLUS n. gen. — This name is proposed for certain very small species, hitherto forming part of the genus *Othius* but differing in numerous more or less important structural features, as may be inferred from the table above. A notable point of resemblance between the two genera is the sculpture of the pronotum, which in both consists of three setigerous punctures at each side disposed in perfectly similar manner, as mentioned above, but, as a rather radical divergence, attention may be called to the distinct frontal grooves of the present genus, which become obsolete and replaced by a transverse post-apical impression in *Othius;* the tarsi also, are relatively more elongate in *Othiellus*. The genus is founded upon such species as *laeviusculus* Steph., and *melanocephalus* Grav.

Parothius n. gen.

This genus is rather closely allied to *Baptolinus* but differs in the important character relating to the number and disposition of the setigerous punctures of the pronotum, stated above, in the more abbreviated palpi, especially noticeable in the form of the fourth joint, in its narrower form, less rounded angles of the head and pronotum, thicker basal parts of the antennae, narrower neck and, as may be inferred, notably different facies. It is also very restricted in geographical range, being confined to the northern Pacific coast regions and is at present represented by a single rather rare species, which may be defined as follows: —

Slender, subparallel, shining, black or with a slight piceous tinge, the prothorax nubilously paler at base and the elytra sometimes faintly paler at base; tip of the abdomen rufous; legs pale, the antennae dusky, rufous; head moderate, subquadrate, scarcely as long as wide behind the antennae, the sides subparallel and nearly straight behind the slightly prominent eyes to the unusually narrowly rounded basal angles; antennae slightly longer than the head, very moderately incrassate distally; eyes moderate, surrounded by a fine deep groove throughout, the groove slightly dilated at the posterior margin; punctures small, impressed and widely scattered; prothorax fully a fourth longer than wide, evidently narrower than the head, the sides nearly straight and feebly, though obviously, converging throughout; elytra somewhat longer than wide, as long as the prothorax and much wider, scarcely visibly wider than the head, very finely, feebly, sparsely and irregularly punctate; abdomen parallel, distinctly narrower than the elytra, finely, sparsely punctulate. Length 5.8 mm.; width 0.8 mm. California (Humboldt Co.)........................**californicus** Mann.

This very interesting species has been borne upon our lists under the generic name *Othius*, but it is really much more closely related to *Baptolinus*, differing however, not only from that genus but any other type of the subtribe known to me, by the dorsal series of pronotal punctures, which resemble somewhat those of *Nudobius*, of the Xantholini. The male sexual characters are feeble, consisting of a narrow, transversely rectilinear truncature of the sixth abdominal segment and the possibly more widely dilated anterior tarsi. The first ventral is carinate in basal half and the prosternum is carinate posteriorly. I have before me only a single male example.

Baptolinus Kr.

The body in this very widely distributed holarctic genus is stouter and more evenly parallel than in the preceding, with more broadly rounded angles of the head and prothorax, the latter being less elongate and, in all but one instance, bearing two setigerous punctures on the medial transverse line, separated by one-half the entire width to somewhat less. There is invariably a large setigerous discal puncture anteriorly at about lateral fifth, and, adjoining the acute lateral edge almost in transverse line with the latter, another equally large and conspicuous. The antennae are rather distinctly longer than the head, somewhat slender toward base and strongly though gradually incrassate distally, with the sparse tactile setae rather conspicuous. The eyes are moderately large and feebly convex, the surrounding groove very fine or subobsolete. The frontal grooves when present, as in the European *affinis*, are widely separated, short and parallel, but they are generally represented by one or two setigerous punctures. The anterior tarsi are strongly dilated in the male but much more narrowly so and more parallel in the female, the latter sex having the narrowed abdominal apex evenly rounded; in the male it is sometimes rounded though frequently transversely sinuato-truncate. The middle coxae are narrower than usual, so that they are not quite contiguous, being separated by the thick cariniform dividing ridge of the mesosternum. The neck is rather more than half as wide as the head as a rule and is obliquely carinate beneath at each side and impressed in the middle, the oblique ridges fitting into corresponding recesses adjoining the membranous and corneous pieces filling the anterior sinuation of the prosternum: the latter is carinate posteriorly and the first ventral is as in *Parothius*. The elytral punctures are not of the usual type but, as in *Parothius*, are extremely minute and sparsely, irregularly scattered, the ground sculpture being obsolete but with the general surface feebly undulato-rugose in several species; the abdominal punctures are sparsely scattered and are fine, though more strongly asperate than usual, and bear rather long stiff reclining hairs. The elytra are glabrous, with a row of small setae near the sutural bead, another on the summit of the flanks and, generally, a medial row of very few in all the species known to me, except the European *longiceps*, where they are sparsely setulose throughout as in *Parothius*. Our species may be differentiated by the following characters: —

Head large, evidently wider than the elytra, the latter large and obviously longer as well as wider than the prothorax. Body stout, parallel, only moderately convex, shining, blackish-piceous throughout, the elytra nubilously rufescent in nearly basal half; legs pale, the antennae darker, rufous; head behind the antennae wider than long, parallel at the sides, the angles broadly rounded as usual; front broadly impressed at the middle and with a few setigerous punctures, with others also sparsely scattered along the base and toward the sides; antennae with the second joint obviously shorter than the third, the latter obconical and as long as the next two combined; prothorax but slightly longer than wide, much narrower than the head, with the sides very feebly converging posteriorly; elytra somewhat longer than wide, rather strongly rugulose; abdomen behind the middle as wide as the elytra, finely, sparsely punctulate toward the sides only, the median parts impunctate. *Male* with the sixth ventral broadly, feebly and evenly arcuate at tip, the female smaller in size and rather more slender, with the sixth ventral narrower and more strongly though evenly rounded at tip. Length 6.0–7.0 mm.; width 0.9–1.05 mm. New Hampshire (White Mts.), British Columbia (Stickine River), Queen Charlotte and Prince of Wales Islands..............................**macrocephalus** Nord.

Head less developed, never wider than the elytra........................2

2 — Elytra equal in length to the prothorax. Body smaller in size than the preceding and more convex, blackish-piceous when mature, with the abdomen paler and rufous, gradually clouded posteriorly with faintly darker piceous, the elytra nubilously pale at the basal margin and sometimes narrowly along the suture; legs and antennae pale rufous; head behind the antennae scarcely as long as wide, parallel at the sides, almost punctureless, except a few large setigerous punctures scattered along the base, a few at the sides and a very large setigerous puncture in the usual position above each eye; front broadly, feebly impressed; antennae with the third joint only slightly longer than the second and nearly as long as the next two combined; neck about three-fifths as wide as the head in the male, not quite so wide in the female; prothorax but little longer than wide and only very slightly narrower than the head in the male, rather more distinctly narrower in the female, the sides subparallel and broadly arcuate; elytra quadrate, slightly wider than the prothorax, polished, almost completely impunctate, feebly undulato-rugulose; abdomen almost as wide as the elytra, rather finely but asperately, conspicuously and sparsely punctate, more sparsely and obsoletely so toward the middle. *Male* with the body noticeably stouter, the sixth ventral broadly and evenly rounded behind, the female having the same segment almost similar, being but slightly more narrowly and strongly rounded. Length 5.6 mm.; width 0.85–0.95 mm. Lake Superior..**americanus** n. sp.

Elytra distinctly shorter than the prothorax; basal angles of the head broadly rounded as usual..3

3 — Body perfectly parallel, the head, prothorax and elytra equal in width. Rather slender in form, convex, shining, evenly ferruginous in color throughout the body, legs and antennae, the elytra not at all darker at any point; head rather well developed, fully as wide as the elytra in the male, rather narrower in the female, slightly wider than long behind the

antennae in the former, as long as wide in the latter, parallel at the sides; antennae with the second and third joints about equal in length and thickness in both sexes and each somewhat shorter than the fourth and fifth combined; surface almost impunctate but with the usual setigerous punctures, a few along the base, a larger one at the sides behind and another above each eye, also one or two behind the point of antennal insertion, and, on the front, in transverse line just behind the large feeble frontal impression, there are two smaller punctures separated by about a fifth of the interocular width; prothorax as wide as the head in the male, just visibly wider in the female, between a fifth and sixth longer than wide, parallel and feebly arcuate at the sides with broadly rounded angles, the surface with the usual punctures and very minute wavy strigilation; elytra unusually small, quadrate, equal in width to the prothorax but much shorter, subimpunctate and only very feebly rugulose, shining; abdomen as wide as the elytra, finely, sparsely punctate, obsoletely so toward the middle. *Male* with the sixth ventral narrow, transversely and rectilinearly truncate at tip, the female with the apex of the same segment broadly, evenly rounded. Length 5.8 mm.; width 0.78 mm. Idaho (Coeur d' Alene), — H. F. Wickham.
quadripennis n. sp.

Body not parallel, the head small in both sexes and the elytra relatively larger..4

4 — Form rather stout in the male, less so in the female, shining, the head and abdomen pale piceo-rufous, the prothorax clear and pale rufous, the elytra black, with the basal margin and sutural bead nubiliously pale; legs and antennae pale ferruginous; head behind the antennae very slightly transverse in the male, about as long as wide in the female, parallel, with the usual setigerous punctures as in *quadripennis;* prothorax much wider than the head in both sexes, with parallel and feebly arcuate sides and broadly rounded angles, only just visibly longer than wide in the male, narrower and fully a sixth longer than wide in the female, the usual dorsal punctures well developed in the latter sex, the transverse median pair wholly obsolete in the male; elytra rather large, quadrate, evidently shorter and wider than the prothorax in both sexes, shining and but feebly rugulose, with some very fine and sparsely scattered nude punctules; abdomen parallel, nearly as wide as the elytra, the fine asperate punctures strong and conspicuous, only moderately sparse and but slightly less developed along the median parts. *Male* with the fifth ventral feebly sinuato-truncate, the sixth much narrower, with a feeble rounded apical sinus half as wide as the entire segment and about six times as wide as deep, the second antennal joint evidently shorter than the third and of about equal thickness, the latter as long as the fourth and fifth combined; *female* with the sixth ventral broadly, evenly rounded at tip, the second antennal joint fully as long as the third and thicker, the latter not as long as the next two combined. Length 4.8–5.4 mm.; width 0.83–0.9 mm. California (Lake Tahoe)..**punctiventris** Fall

Form more slender, the size smaller, equally convex and shining, pale and almost uniform testaceous throughout the body, legs and antennae, the elytra nubilously and gradually shaded with blackish or piceous behind basal two-fifths or thereabouts; head about as long as wide behind the antennae in both sexes, parallel, with the usual broad and feeble frontal impression and setigerous punctures; prothorax nearly similar in the sexes and more elongate than in the preceding species, about a sixth longer than wide and just visibly wider than the head in both; sides parallel and feebly arcuate, with the angles broadly rounded, the usual discal punctures, including the transverse median pair, distinct in both sexes; elytra quadrate, evidently shorter than the prothorax but only just visibly wider, smaller than in *punctiventris* but otherwise nearly similar; abdomen as wide as the elytra, punctured nearly as in the preceding species but more closely. *Male* with sexual characters nearly as in *punctiventris*, the shallow sinuation of the sixth ventral even wider and more feeble, being about eight or nine times as wide as deep, the second and third antennal joints equal in length and thickness, and each distinctly shorter than the fourth and fifth combined; *female* with the sixth ventral broadly and evenly rounded, the second antennal joint evidently longer and thicker than the third, the latter relatively still smaller than in the male, the body slightly smaller and more slender as usual. Length 4.3–4.8 mm.; width 0.75–0.78 mm. California (Siskiyou Co.)..**fraternus** n. sp.

The species described above under the name *americanus* is the one that has long figured in our lists as the European *pilicornis* Payk., but a carefully identified example of the latter species sent me by Mr. Reitter, shows that there is not even a close resemblance between them, the prothorax of *pilicornis* being much shorter and narrower than the elytra, the latter being even more largely developed. In addition, the coloration is different and the head notably larger, more transverse and with numerous large dorsal punctures, of which there is not a trace in the American species. Of *punctiventris* I have before me three examples, two females and one male. The females have the transverse medial pair of pronotal punctures well developed, but the male has no vestige of them and is the only specimen in my cabinet, of either American or European species, in which these setigerous punctures are not distinctly evident and very regular in formation. It is almost impossible to believe that their absence in this single male is not a malformation, although in such cases, concerning characters of such persistence, there is usually a trace of one or both at least on one side, but here they are completely wanting, without even a vestige on either side. If by further examination this be found to be a male sexual peculiarity of *punctiventris*, it will constitute an additional and very singular specific character. The *ongiceps*, of Fauvel, which by some mistake has found its way to our lists, does not occur here; it is an aberrant species in having the elytra sparsely setulose throughout, as above remarked, and I know of no American form to which it is at all closely related.

Subtribe **Diochi.**

The chief characters distinguishing this subtribe are the slender maxillary palpi, with the third joint elongate and but feebly enlarged from base to apex and densely clothed with minute recumbent pubescence in addition to the longer tactile setae, the fourth joint being extremely small and slender, aciculate and very oblique, the normal elytral suture and the smaller, less transverse mentum. The antennae are of the Xantholinid type, densely clothed with fine pubescence except toward base, but are more slender than usual and are more widely separated at base as in the Othii, with the epistoma short, broad and trapezoidal between them. A character which appears to be widely divergent from anything known in the two preceding tribes, is the larger, less transverse, broadly rounded and entire labrum, with a very minute median denticle at the apical margin and the mandibles in *Diochus* are arcuate, not grooved externally but with the outer edge acute. The fine close-set punctures of the abdomen are also different from anything occurring elsewhere in the tribe, so that, as a whole, *Diochus* is sufficiently isolated to demand without doubt subtribal distinction. The single known genus may be described as follows: —

Body very small in size and slender, pointed before and behind or fusoid in outline, the head very small, elongate, without frontal grooves or impressions, evenly convex and unmodified on the flanks behind the rather well developed and somewhat coarsely faceted eyes, the latter not surrounded by a groove or impression; basal angles very broadly rounded; gular sutures strong, straight, widely separated anteriorly, gradually converging and becoming contiguous or nearly so at the extreme base only; prothorax elongate, comparatively large, narrowed from the base to the subcircularly rounded apex, the side margins acute to the apex; neck narrow, about a fourth as wide as the head; prosternum tumid in the middle posteriorly, the surface turned slightly upward anteriorly;

elytra impunctate except three or four rows of widely spaced setigerous punctures, glabrous except along the lower part of the inflexed flanks, where there is some sparse reclining pubescence; abdomen finely, closely punctulate and pubescent throughout; middle coxae very large, contiguous, extending from the middle virtually to the sides of the body, with the exposed surface flat, the anterior coxae very large and prominent as usual; legs moderately stout, the anterior tarsi strongly dilated, rather less strongly so in the female, the posterior slender, filiform, closely clothed throughout with very short inclined setulose pubescence, the basal joint much longer than the second, the first four joints rapidly decreasing in length. Probably cosmopolitan........**Diochus**

I have had no opportunity to compare the European species with our own, but presume there is no generic difference of any kind; the above description is drawn throughout from the American representatives.

Diochus Erichs.

The general habitus of this genus is unique in the present tribe, the remarkably small elongate head being proportionally less developed than in any other Staphylinid type that I can recall at present; this, with the anteriorly and not posteriorly narrowed prothorax, fusoid outline and fine close pubescence of the abdomen, adds to the disparity. The prothorax has a broadly and evenly arcuate base, quite as evenly but more strongly rounded apex, with very broadly rounded angles, and the dorsal surface has four small setigerous punctures near the middle, forming an elongate parallelogram, and, more anteriorly and nearer each side, there is a larger setigerous puncture; further still toward each side there is an arcuate longitudinal series of about four punctures, also a few scattered along the edges throughout the periphery. The head has a number of setigerous punctures sparsely scattered toward the sides but otherwise is impunctate. The pronotum has no trace of wavy strigilation or other minute ground sculpture so usual in the Xantholini and Othii; the surface is highly polished throughout, the abdomen being dullish because of the dense fine vestiture. The species are apparently more numerous in America than in Europe; they are very active, running with greater velocity when disturbed than is usually the case in the preceding subtribes. The descriptions given below are derived from the male, except that of *pallidiceps*, which is taken from the female:—

Head black or blackish, the abdomen black to piceous.................. 2

Head pale piceous-brown, the abdomen black, with the tip paler. 5

2—Elytra distinctly shorter than wide; head narrower, more rounded at base.. 3

Elytra longer, nearly as long as wide; head wider, more truncate at base..4

3 — Moderately slender, piceous, the prothorax paler and more flavate, the elytra blackish in maturity, with the apical margin pale, the head piceous-black; legs pale, the antennae dusky, paler toward base; head very narrow and elongate, the eyes small but rather prominent, the sides behind them subparallel and feebly arcuate; prothorax large, elongate, one-half wider than the head, widest near the base as usual; elytra not very much shorter than wide, three-fourths as long as the prothorax, the sides feebly diverging, almost continuous in direction with those of the prothorax; abdomen large, fully as wide as the elytra, about half as long as the body, gradually tapering behind, the sixth segment narrowly trapezoidal. *Male* with the fifth ventral broadly truncate, becoming visibly though feebly sinuate toward the middle, the sixth segment with a feeble, rounded, indefinitely limited sinus, about a third as wide as the apex and five or six times as wide as deep, the antennae one-half longer than the head, slender, feebly incrassate distally, the second and third joints equal and elongate, each nearly as long as the next two combined; *female* with the prothorax relatively smaller, narrower and more narrowed anteriorly, the antennae nearly similar but somewhat shorter, the sixth ventral broadly and very evenly rounded behind. Length 3.8–4.0 mm.; width 0.65 mm. Rhode Island, North Carolina (Asheville), Missouri and Texas (Galveston). **schaumi** Kr.

Nearly similar throughout to the preceding but distinctly more slender, dark piceous-brown, the head more blackish, the prothorax paler and more flavate; legs and antennae similar; head as in *schaumi*, the eyes rather less prominent; prothorax narrower and slightly more elongate, rather more narrowed anteriorly and not quite one-half wider than the head; elytra notably shorter, very much shorter than wide and about three-fifths as long as the prothorax, the sides feebly diverging from the base in the direction of the sides of the prothorax; abdomen similar to that of *schaumi* but acutely pointed behind, each dorsal with a median transverse series of widely spaced setigerous punctures as usual. *Male* with the apex of the fifth ventral similarly sinuate toward the middle, the sixth with a rather larger but otherwise similar sinus at tip, nearly half as wide as the apex and about five times as wide as deep; *female* with the sixth ventral broadly, feebly and very evenly arcuate at tip, the form of the body and prothorax not differing appreciably from the male. Length 3.2–3.7 mm.; width 0.6 mm. Virginia, North Carolina (Asheville) and Missouri ....**brevipennis** n. sp.

4 — Body much stouter, the head and abdomen black or blackish, the

prothorax pale, the antennae darker, rufous, the elytra piceo-rufous to piceous-black throughout; head rather wider than in *schaumi* and more broadly rounded at base, elongate as usual; prothorax very large, only about a fifth longer than wide, fully one-half wider than the head, with all the angles broadly rounded as usual and with the feebly arcuate sides converging anteriorly between the basal and apical angles; discal punctures as usual; elytra well developed, slightly wider than the prothorax and from four-fifths to five-sixths as long, the sides moderately diverging from the basal angles; abdomen fully as wide as the elytra, tapering toward tip as usual. *Male* with sexual characters nearly as in the preceding, the fifth ventral very feebly sinuate in median third, the sixth with a rather strong apical sinus, occupying almost half the width and about five times as wide as deep but rather larger, deeper and more angular or less broadly rounded at the bottom than in *schaumi*, the antennae similar to those of the preceding species. Length 3.7 mm.; width 0.72 mm. New York (Long Island) ....**thoracicus** n. sp.

5 — Body less fusiform than in *thoracicus* and much stouter than in *schaumi*, the head and elytra rufo-piceous, the prothorax paler, the abdomen blackish with the apex pale; legs and three basal joints of the antennae pale testaceous, the remainder of the latter blackish; head elongate, relatively larger than in *schaumi*, arcuato-truncate at base with the sides parallel, the basal angles and antennae almost similar, the eyes notably larger and equally prominent; prothorax much narrower and more elongate, with less converging sides than in the female of *schaumi* but otherwise similar, scarcely more than a third wider than the head; elytra well developed, scarcely visibly shorter than wide, but little shorter than the prothorax and nearly a third wider, the sides diverging nearly in the direction of those of the prothorax as usual, the humeri more laterally exposed at base than in *schaumi;* abdomen nearly similar to that of the three preceding species, at base fully as wide as the elytra, tapering posteriorly, the tip narrow. *Female* with the fifth ventral evenly and rectilinearly truncate, the sixth more elongate and tapering than in the male as usual, the apex broadly, feebly and evenly arcuate. Length 3.8 mm.; width 0.68 mm. Texas (Austin).
pallidiceps n. sp.

Brevipennis is very closely allied to *schaumi* and inhabits almost identically the same geographical regions; it may therefore prove to be nothing more than a subspecies or dimorphic stage. It can only be said at present that there is no trouble whatever in separating the two forms, *brevipennis* having noticeably shorter elytra in both sexes and differing further in its slightly smaller size and still more slender outline. *Thoracicus* is distinct in a number of striking features of form, structure and coloration, and it is doubtless a fully differentiated species; the elytra, when black, do not have the pale apical margin noticeable in the corresponding examples of *Schaumi.**

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* The following sp occurs in South Africa in the neighborhood of the Cape: —

Slender, piceous-black, shining, the elytra sometimes pale along the suture and at apex; le, the antennae blackish; head small, parallel, elongate, with rounded basal angles, the surface convex and with fine scattered punctures along the base of the occiput, on the flanks and on the under surface, elsewhere impunctate, except a setigerous puncture at the middle of the upper margin of the eye, and, at each side of the middle in apical half, a longitudinal series of some four or five similar punctures; surface minutely strigilate, very feebly behind but more finely, strongly and subreticularly anteriorly; eyes rather prominent; prothorax much wider than the head, oblong, scarcely visibly narrowed anteriorly, the apex and base subequal and broadly rounded, nearly a third longer than wide, with the sides feebly arcuate, the angles rounded; disk convex, with an oblong quadrilateral of four punctures at the centre, one more anterior and slightly more lateral, and an arcuate sublateral series of three or four punctures anteriorly at each side; also others disposed along the lateral and anterior margins; elytra much wider but distinctly shorter than the prothorax, fully as long as wide, each with three series of setigerous punctures, otherwise punctureless; abdomen at base as wide as the elytra, finely, moderately closely, asperately punctulate and with fine decumbent pubescence in addition to the tactile setae bristling from the sides, present also at the sides of the head, prothorax and elytra. Length 3.0 mm.; width 0.48 mm. Wellington...**astutus** n. sp.

The sixth ventral of the male is scarcely more than half as wide as the fifth, with its apex sinuato-truncate; the anterior tarsi of the same sex are broadly dilated.

ADDENDUM.

During the course of the present work the following exotic genera and species, or those occurring beyond the limits of the nearctic fauna, have been described as new: —

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